The Library
of the
University of North Carolina

Collection of North Caroliniana
Endowed by
John Sprunt Hill
Of the Class of 1889

C630.5
N87p
v.1
1858

This book must not be taken from the Library building.

FEB 11 1950

AUG 15 '52

~~MAY 13 1967~~

Digitized by the Internet Archive
in 2012 with funding from
University of North Carolina at Chapel Hill

http://www.archive.org/details/northcarolinapla1858gorm

McDowell

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

**VOL. 1.** **RALEIGH, N. C., JANUARY, 1858.** **NO. 1.**

## THE NORTH CAROLINA PLANTER,

Is published monthly, in Raleigh, N. C., at ONE DOLLAR A YEAR, ☞ *payable invariably in advance.* ☜ From this rule there will be no deviation.

No copy will be sent unless the cash accompanies the order; and it will be promptly discontinued at the close of the subscription year, unless the money is forwarded for renewal.

Gentlemen of ability and experience will conduct the PLANTER. All communications to be addressed to A. M. GORMAN, Publisher.
Raleigh, N. C.

RALEIGH, Jan. 13, 1858.

A. M. GORMAN, ESQ.:

*Dear Sir*: I send you for publication in the first number of your Agricultural paper, the enclosed papers, submitted to the Executive Committee of the State Agricultural Society, at their late meeting, by Dr. Wm. R. Holt, of Davidson. Upon Lot No. 1, the premium of $40 was awarded and upon Lot No. 2, the premium of $50.—The Executive Committee were in session three days, and were occupied most of the time in examining the Essays on "Hill-side Ditching." There were four Essays on this important subject, and all were of so high a character that the Committee determined to delay the decision upon their merits until the next meeting, which will be held on Tuesday of Wake Superior Court, when it is hoped all the members will be present.

Very respectfully, yours &c.,
W. D. COOKE,
*Sec. Ex. Com.*

## Lot No. 1.

LEXINGTON, Davidson Co. N. C.
October, 1857.

*To the Executive Committee of the State Agricultural Society:*

I submit a concise statement of the varirious particulars respecting the cultivation and product of the Lot No. 1, in Wheat, in 1857, submitted to the Executive Committee of the State Agricultural Society.

LOT No. 1—*At my Trentham Place.*—This Plantation was bought in 1828. The Lot named had been entirely exhausted and had not been in cultivation for a few years, and constituted a part of a grazing Common, and would not have repaid for cultivation as it then was. It consisted of 8 acres and 36 hundredths, and was set apart for a grazing lot, if it could be made to produce Clover.

After cleansing the land of stones, which were put into underdrains in a low flat part of it, and grubbing up the sassafras, old peach trees, mulberry shrubs, persimmon bushes, &c., it was cultivated in corn and oats to cleanse it and test its remaining powers, with very poor returns. Eventually it

155329

was broken up seven inches deep and sowed in oats at the rate of 2 bushels per acre, and they turned under in the milk state the last of June, 1843. Lightly manured all over the next Spring and put in corn. The result, a good crop followed, with the next year a good crop of oats and stand of clover from spring seeding. The rotation has been since, mainly corn, oats, clover, clover. The latter grazed until within a few years, since I have began the cultivation of Wheat. The Rotation has been an irregular one—mainly wheat, corn, wheat, clover, clover.

The wheat crop now submitted, followed the last crop of clover in this rotation and was grazed very close. In August the lot was coultered 15 inches deep with three horses, 10 inches apart in the furrows, and grazed in the mean time. Fallowed the last of August and first of September with three horse turning plows, to the depth of 8 inches—harrowed with heavy three horse harrows. The Fall season being very dry, and the fallowing being across the coulter furrows, the ground broke up into very large clods, upon which the harrows could not have much effect. The Clodcrusher (made by R. Sinclair, Jr., of Baltimore) was then introduced and passed with much effect over the whole, and repeated over the cloddiest portions. On the first week of November the Wheat and Guano was sowed—two bushels and one-eighth of the former, and 250ths of the latter. Plowed in with one horse sharp, shovel Plows, harrowed, and then rolled with the Clodcrusher. The use of the harrow seemed most effective in tearing up and bringing to the surface the remaining clods, which were most beautifully reduced by the Clodcrusher. The field was brought into the most beautiful, fine and well pulverized condition, and left so until the 10th of last March, when it was sowed in grass seeds, viz: 6 quarts of clover seed, and one bushel of orchard grass.

The wheat (white Etrurian) was cut on the 21st of June, with a 3 horse reaper, (made by Obed Hussey of Baltimore,) and was saved very clean. It could not have been cut with Grain Cradles, without great difficulty and loss. It stood very thick on the ground and much of it five feet six inches in height.

The yield, forty-six bushels and sixty-fou hundredths per acre—of 60 lbs, to the bushel.

This lot, I omitted to mention, was frequently dressed, when in the clover part of the rotation, with leached ashes and Plaister of Paris, at the rate of 10 bushels per acre of the former, to 1 bushel of the latter.

The soil, a deep, heavy, red clay loam.—The natural growth on adjoining and similar lands, red and white oak, gum, hickory, dogwood, and wild grape vines. The largest yield heretofore on an adjoining lot, was 35 bushels per acre, without Guano.

ESTIMATED COST OF LABOR, SEEDS, MANURES, &C.

| | | |
|---|---|---|
| Coultering (3 horses) | $2 50 | per acre |
| Plowing (3 horses) | 2 50 | " " |
| Harrowing (3 horses) | 0 40 | " " |
| Cl'd Crush'g. Rol., (3 horses) | 0 40 | " " |
| Extra harrowing and clod-crushing, | 0 10 | " " |
| Seed wheat 2½ bush. $1 25 | 2 65 | " " |
| Guano 250 lbs. per acre | 7 50 | " " |
| Sowing wheat and Guano | 0 20 | " " |
| Shovel plowing | 0 75 | " " |
| Harrowing | 0 40 | " " |
| Clod crushing | 0 40 | " " |
| | $17 80 | |

| | BUSHELS. | |
|---|---|---|
| Product | 46 64 | |
| At $1 25 | 11 66 | |
| | $58 30 ——— | $58 30 |
| | Expenses ——— | 17 80 |
| | Nett proceeds | $40 50 |

Exclusive of Interest on land, and Taxes.

The above lot was broken up into an unparalleled rough and cloddy condition, and I determined to try the capabilities of my implements to bring it into a fine, pulvuritent state, to make, in my view, the Guano pay, and to secure a good stand of grass for profitable grazing hereafter.

All of which is respectfully submitted,

W. R. HOLT.

## Lot No. 2.

*To the Executive Committee of the State Agricultural Society :*

Statement of the Cultivation, Products, &c., of Lot No. 2, in Wheat, during the year 1857,

Three fourths of this Lot had been in the cultivation of cotton for 35 years successively, and for the last ten years had been manured with well rotted farm yard manure every two or three years, and also every two or three alternate years dressed with leached ashes over the recent planted cotton seed, in the drill and on the surface—the general product of cotton in the seed from 8 to 1200 lbs.

In the Spring of 1856 it was deeply plowed, 7 to 8 inches with three horse plows, harrowed and planted in corn. During the last of October the corn was gathered, the corn stalks cut close to the ground, removed to the barn yard, and Wheat at the rate of 2 bushels of early Purple Straw was sown to the acre, with at the same time 200 lbs. of Peruvian Guano—plowed in with sharp shovel plows and thoroughly harrowed with 3 horse harrows, and cross harrowed. The sowing of the wheat and guano was made the second week of November, and the land in the finest possible tilth.

The wheat was cut with a Hussey wheat reaper, and the yield on the 22 .75 acres, 967½ measured bushels of early purple straw, weighing on Fairbanks' balances 65 lbs. to the bushel. At 60 lbs. per bushel, the yield is 4,607 bushels per acre.

This Lot, No. 2. is at my Linwood Farm The soil is naturally of the best quality of upland, and consists of a deep chocolate clay loam, lies very high and undulating and is the north end of a field of 40 acres and was cut off from the field in a regular form, but was the best wheat in the field, as a portion of it the remaining was winter killed, from the blowing off the deep snow and wetness of a part of the field.

ESTIMATED COST OF LABOR, SEED, MANURE, &C.

| | | |
|---|---|---|
| Listing off into 18 cut lands with 2 horses, | $0 15 | per acre. |
| Sowing wheat and Guano, | 0 20 | " " |
| Shovel Plowing, | 0 75 | " " |
| Harrowing and cross Harrowing, 3 horses, | 0 80 | " " |
| Seed wheat, | 2 65 | " " |
| Peruv. Guano, 200 lbs. | 6 00 | " " |
| | $10 55 | |

| | BUSHELS. | | |
|---|---|---|---|
| Product | 46 07 per acre. | | |
| At $1 25 | 11 51¾ | | |
| | 57 58¾ | | $57 58¾ |
| | | Exp. | 10 55 |
| | | | $47 03¾ |

Nett product, exclusive of interest on land, and taxes.

The charges for the labor of cultivation above made, may be considered by some too liberal, but from great experience I consider them about right.

All of which is respectfully submitted by

W. R. HOLT.

---

North Carolina,
Davidson County.

I Azariah Williams, County Surveyor for Davidson County, being sworn, declare that I have carefully surveyed and measured the following Lots of land for Dr. William R Holt, of Davidson County, and that the measurement is correct.

Viz: Lot No. 1—At his Trantham place near Lexington, from which a crop of wheat has been taken the present year, measured eight acres and sixty-three hundredths, (8 .63 acres.)

Lot No. 2—At Linwood, his Jersey Plantation, from which also a crop of wheat has been taken the present year, measured twenty-two acres and seventy-five hundredths. (22 .75 acres.)

AZARIAH WILLIAMS.

Sworn to and subscribed before me an acting Justice of the Peace for Davidson County, on this the 16th of October, A. D., 1857.

C. L. PAYNE, J. P.

North Carolina,
Davidson County,

I William R. Holt, of Lexington, Davidson County, being sworn, say that I took proper care to have the wheat grown on the within Lots, Nos. 1, and 2, measured by Mr. Williams, the surveyor, and that I believe the measurement of the Wheat, as it was measured and tallied in the presence of myself and son, one or the other during the time, to be correct—as follows:

Lot No. 1, at the Trantham place, consisting of 8 acres and 63 hundredths, measured full measure, three hundred and sixty-eight bushels, (368 bushels) of White Etruria Wheat, weighing 64 lbs. to the bushel, and at the rate per acre 60 lbs. to the bushel, of forty-six bushels and sixty-four hundredths, (46 .64 bushels per acre.) (Measured in a sealed half bushel )

Lot No. 2, at Linwood, my Jersey Plantation, consisting of twenty-two acres and seventy-five hundredths, measured under the same circumstances, nine hundred and sixty-seven and a half bushels of Early Purple Straw Wheat, viz: (967 .5 bushels of 65 lbs. to the measured bushel). At 60 lbs. to the bushel the measurement to the acre would be forty-six bushels and seven hundredths per acre, viz: (46 07 bushels per acre).

The above I believe to be correct and true, (measured in a sealed half bushel.)

W. R. HOLT.

Sworn to and subscribed before me an acting Justice of the Peace for Davidson County, on this the 16th of October, A. D., 1857.

C. L. PAYNE, J. P.

North Carolina,
Davidson County,

I James M. Hoit, witnessed the tallying and measurement of the aforesaid Wheat from the Lots named in the foregoing paper, and being sworn, say that I believe the measurement to be correct, as care was taken to have it so.

JAMES M. HOLT.

Sworn to and subscribed before me, an acting Justice of the Peace for Davidson County, October 15th, 1857.

C. L. PAYNE, J. P.

---

For the North Carolina Planter.

## Rotation of Crops.

Much has been said and written upon the rotation of crops as a means of improvement, or at least, a preventive of the deterioration of the soil. It is certainly true, that when the simplicity of natural production is interrupted by the introduction of plants not indigenous to the soil, that the continued cultivation of any one of the cereals or other staple crops results in a failure to make remunerative returns. Even most of the grasses, which last much longer than other artificial crops, at last give away to those which are indigenous, and finally disappear unless renewed after cultivation. Perhaps the only exception to this rule, is to be found in some varieties of those of the order which have fibrous roots and which delight in moist or even wet soils. The red top herds grass is the most regardless of rotation, being exceedingly hardy and enduring. but even that is finally overcome by broom straw, the natural grass of all naked land in our latitudes. Such facts have been long observed by agriculturists, and systems of rotation, that is, alternating different crops upon the soils in successive cultivation, has been adopted with marked success. The general birol world is greatly indebted to many distinguished and accurate observers who have condensed a vast amount of practical knowledge in relation to this subject. Much of error has been exposed, and a great amount of practical truth has been developed. Continued cultivation of the same surface with different crops, have produced most satisfactory results, with the application of inconsiderable quantities of manure, and left the sod in a manifestly improved condition, whilst an adherence to the same crop, even with increased quantities of manure, has resulted in continually diminished production and a manifest deterioation of the soil. It is not my purpose to enter into the philosophical reasons given for this result, nor to analise the conflicting theories which have been from time to time maintained as to the causes which operate in its production. The fact exists, and the fact that judicious rotation affords a valuable remedy, is as well established. Indeed the teachings of Nature, the great instructor in Agriculture, leads us to the same conclusion.—For where the same forest crop stands for centuries upon the land, the whole of the surface is covered with a variety of vegetables springing up, maturing, and decaying, together with the annual return of all the leaves and falling bark of the trees, as well as their fruits, present us with a beautiful series of manures and successive crops, which preserve and increase the productive powers of the soil. This would continue indefinitely if we did not remove both the forests and the indigenous vegetables, and substitute other and artificial crops, the whole of which on account of their value, are removed from the surface, and make no restitution for the recuperation of the productive power.—Hence the necessity of manures made elsewhere, and of what is usually and erroneously called resting land. I say erroneously in a philosophical sense, because rest can only be figuratively applied to a subject which has neither animal life, nervous or muscular organization. It is only necessary to look upon a well cultivated garden, which is never *rested*, but annually manured and subjected to thorough cultivation, to learn that this is the best way to obtain the greatest production and the highest improvement. Indeed, to say that one possesses an old garden spot, is to account at once for the greatest production of the vegetable crops usually cultivated in such a place. And even in the best gardens, judicious cultivators find advantages even where manure is most liberally applied, in changing the crops upon the several portions of the garden, and thus by skillful rotation securing the continued application of productive power, as well as the perfection of the vegetables produced. The system of resting the shifts in our farms, is nothing but an imperfect effort at rotation, by permitting the earth to produce indigenous grasses in order to its own recuperation. And when these are not all grazed off by stock, the frail sterility of overworked and unmanured surfaces is for some time deferred. It is a fundamental error that good cultivation has a tendency to empoverish land even whilst producing crops. If enough of manure, vegetable or mineral, is returned to the soil to compensate for the crop abstracted, perpetual cultivation by exposing the soil to the atmosphere, the rains and the dews, as well as the alternatives of heat, will continually improve instead of injuring the soil. But since the support of a sufficient amount of stock, for both the comfort and the profit of the agriculturist, demands a grassy surface which comes in the system of all judicious rotation, it is necessary that there be regularity in the process, and that the teachings of experience should be regarded as to the most profitable and useful succession. There may be rotation so injudicious, crops alternated so much out of place, as to increase the labor incalculably without a correspondent increase of production or benefit to the soil. These errors are to be corrected only by experience and accurate observation—observations made by those who are attached to no theories or prejudiced by foregone conclusions. Conclusions to be valuable must be the result of frequent experiments, with due allowance for differences of climate, seasons and cultivation, as well as the varieties of crops which are used in the rotation. Wherever any system of cultivation and routine of crops result in decreased production and deteriorated soil, that system ought to be changed and another substituted which is at least less ruinous. No direct observer can fail to be convinced that the rotation of corn and oats, or wheat, the corn preceding and the small grain following, even with what is usually termed a year of rest, with heavy treating and grazing, has nearly destroyed the arable surface of this portion of North Carolina; and yet the system is adherred to most pertinaciously, until the exhaustion of the country found relief in the emigration of the land-destroying occupants, and permitted wronged and insulted nature to recuperate herself by a rotation of poor grasses and a growth of Pines;—a process of restoration, slow but sure, and ultimately bringing back to the power of producing cereal grains, soils which had been robbed of the elements necessary for their growth and maturity. The error is, that corn, which is a universal feeder upon the elements of productiveness in the soil, is the fallow crop, and exhausts those peculiarly adapted to the nurture of wheat or oats, and is followed by one or the other of those crops which of necessity feed upon the residue left upon a clean and bare surface, thus leaving the land greatly exhausted. And for the further reason, that the deep ploughing is given to the corn, and the small grains are put in after that crop with light and shallow cultivation. The surface is thus doubly taxed, and no recuperative energy given by the application of manure. The rotation should be, first a deep fallow upon land with all its accumulated herbage, and a crop of wheat sown upon it with a moderate application of guano, say one hundred pounds to the acre, and the wheat early sown, and the successive crop to be corn, upon a deep and thorough breaking, after the wheat; the land unless of a spongy nature kept after harvest for the heading of heavy stock. Upon this corn land, when the crop is laid by, a seeding of one and a half or two bushels of peas should be sown, and either wheat or oats to succeed that crop ploughed in. Should a moderate amount of guano be applied, the second crop of wheat will be much the best; the intermediate corn crop greatly larger than one produced upon the same land from a fallow, and the successive deep ploughings, and wheat stubble and peas ploughed in, leave the land greatly improved, to say nothing of the advantage derived from the destruction of weeds, bushes and briars, resulting from three successive annual deep cultivations. Corn should follow, instead of preceding wheat, and whoever shall try the experiment as directed will be astounded at the result. The intermediate crop of peas does no injury to the corn, and is a most excellent feeder for the wheat.—Three years of cultivation and two of grass, always protecting the field last in wheat or oats for grazing by heavy stock until the autumn of the first year, and reserving the second year which precedes its fallow, for wheat, for its heavy grazing, will exhibit such a revolution in the appearance as well as the production of our country as will surprise those who have not witnessed their effects. This suggestion is made to induce the trial to arrest in some measure the destructive, and to substitute the recuperative system of rotation. Of course these remarks are chiefly applicable to the ordinary uplands of our country, for deep alluvial soils may for a long succession of years, by mere deep ploughing and turning up a rich new surface, continue to produce heavily, but even they would be better in every respect for such a rotation, and richly repay in their increased fertility of production. All of the above remarks are made with the understanding that every farmer will make and apply all the manures which he can secure, to the surface which he cultivates. for without manures there is no successful agriculture, and without them the utter sterility of any part of our cultivated surface, is a mere question of time, sooner in its arrival under the worst, but equally certain with the best, if manures are not made and applied.

Upon this subject, to wit, the making, procuring, and applying manures, I may probably communicate with you, hereafter. This communication is in response to your application for aid in the conduct of the Agricultural Journal which you propose to publish, and to the support of which, I trust the practical and experienced farmers of North Carolina, will promptly contribute. Their experience, contained in practical essays, is more needful than the money, as necessary as that is to the success of an enterprise in which I wish you much success.

Yours respectfully,
A. W. VENABLE.
Brownsville, Dec. 22, 1857.

## Sugar Cane Culture.

The following letter on the "planting, culture and manufacture of the syrup from the Chinese Sugar Cane," has been handed us by the Secretary of the Richmond Agricultural Society, and we take pleasure in laying it before our readers. It will be found to possess much valuable information, to those desiring to enter into the culture of this important product.

From the adaptedness of the Chinese Sugar Cane to our soil and climate, and the facility with which the syrup is produced, its culture will doubtless soon form an important part of the Agricultural industry of the Southern States. Every one will therefore, be desirous of seeing the experience of those who have tried and proved it.

From the Argus.

Rockingham, Dec. 11th, 1857.

Dr. A. PATTERSON, Cor. Sec'y.

Your letter as corresponding secretary of the Richmond Agricultural Society, has just been received, and I hasten as you request an early response.

You are pleased to ask, for the benefit of your Society, for such information as I may possess in relation to the planting, culture, and manufacture of Syrup from the Chinese Sugar Cane.

The seed I planted the present year, were the product of some few obtained from the patent office the year before.

The ground, (gray sandy soil) had been respectably manured for a series of years, and at the time of planting would have yielded some 25 bushels of corn to the acre.

I broke up the ground in the usual way, with a one horse plough, after which, when I got ready to plant (early in April) I took the common shovel or scooter plough, and fixed a wooden mould board, by simply nailing upon the helves on the side just above the plough two pieces of weatherboarding plank, some 12 inches long.

Being thus prepared, I placed one of my briskest working horses to the plough and run off my rows three feet apart, going twice in the same furrow.

I did this in the first place to deposit my manure as deep as possible, so as to avoid any waste from evaporation, and in the second place to protect the young and tender plant, from the cauterizing effect of too near proximity to the Guano.

I then took 200 pounds of peruvian Guano to the acre, and after mixing it with vegetable mould, I drilled it in the bottom of the furrow, just as you would cotton seed or other manure.

This being done, I took a one horse turning plough and lapped on either side one furrow and let the ground remain until it become compact.

When ready for planting, I opened with a small Drill plough, after the manner of planting cotton, and at the distance of three feet in the drill I dropped from five to eight seed, covering them not more than one inch deep.

I worked it, just as I worked my corn, with this difference, that it took one ploughing less.

I left the ratoons or suckers, to remain after thining out to two stalks in each hill.

In September Court week (about the 20th.) I cut it off within some 4 inches of the ground and took it to an iron mill, of two rollers, which had been purchased in Georgia, by myself and relations, for the express purpose of manufacturing the syrup.

The fodder was stripped off before the cutting.

It was then run thro' the mill and the juice expressed by the aid of one horse attached to a lever.

I planted one and a half acres, and had my kettle of capacity sufficient to boil the juice about as fast as it was expressed.

In the boiling process, I had the experience of those who had gone before me.

I boiled the juice about 6 hours regularly, skimming off the scum and froth as it arose to the surface.

The juice yielded, about 1 to 7.

I made 270 gallons of a very superior article, equal, in my estimation, to the best New Orleans.

I give it as my opinion, of which I have no doubt, that from land yielding 50 bushels of corn to the acre, that 200 gallons can be made.

I look upon it as forming an era in the agriculture of the country, and one of the greatest blessings vouchsafed to man (Indian corn excepted.)

It came at a time when molasses had rose high and got beyond the reach of the masses, when the consumption had over-reached the production.

It is now in the power of every family to have a cheap and wholesome food to their command.

One of its main values, is a food for hogs, for this purpose I refer your society to the last number of the Southern Cultivator, in which you will find a fair experiment made by a planter and the result given to his brother farmers, over his own signature.

He took two shoats, the one weighing 76 the other 78, and placed them in two separate pens.

To one he fed corn and slops from the kitchen, to number 2 he fed only the unground chinese cane with its seed.

At the expiration of 3 weeks, he weighed both.

No. 1 gained 39 pounds, and No. 2 gained 37 pounds.

This statement I verily believe, for from the great abundance of the sacharine matter, it must be highly nutricious.

If this be so, I ask what more do the Farmer's require?

All my fears are that the seed will deteriorate by running into other varieties. Against this we should guard.

Whether it will make sugar or not, in sufficient quantities to justify its use for that purpose, I have no means of ascertaining.

The "Sorgho Sucre," the seed of which has been distributed by the patent office for the last three years, is of chinese origin, and of a dark purplish color.

I look upon the seed for food about as valuable as oats, weighing some 38 pounds.

It is wonderfully productive in seed. I made 70 bushels on the ground spoken of.

I have sent the iron mill to my Anson plantation, where I expect to plant the coming year 15 to 20 acres solely for my black family and stock.

Should you go into the manufacture of the syrup, I would advise you to procure the sugar kettle proper, which is not circular but oblong.

This enables you by exposing a greater amount of surface to evaporate, to complete the boiling process, in a less time.

I used a small quantity of lime in each kettle of juice, to correct and neutralize the acidity, say about one gill to forty gallons.

We have up this way the greatest plenty of seed, and it would afford me pleasure to furnish my Brother Farmers of your society gratuitously, with some 3 or 4 bushels should you require.

I write you in haste, as I am about leaving home, and this letter is at your disposal.

Respectfully, Sir, yours truly.

W. F. LEAK.

From the American Farmer.

## Hog Feeding and the Sweet Potato Culture in N. C.

Our North Carolina friends are not behind their neighbors of Virginia and Maryland in the article of good hams. We are indebted to one of them for the following information as to their peculiar mtehod of fattening pork upon the field pea and the sweet potato. We regret to hear, at the same time, that this year a very severe drought extending from the 20th September, has shortened these crops very materially.

The crop of sweet potatoes is planted along side of the peas, and successive portions are fenced off and consumed without waste upon the ground. They turn their hogs upon the peas when sufficiently ripe, but only those which are to be fattened. It is dangerous to put stock hogs upon them, as they cause weakness of the loins, which is frequently fatal to them during the following season. There is more danger of this result on sandy than on other soils. We mentioned these facts in our last, as stated by Mr. Ruffin, at a meeting of farmers in Virginia, and they are confirmed by several North Carolina farmers, whom we have talked with since. Some farmers commence feeding on the peas and potatoes at the same time—others feed a week or two on peas before they begin with the potatoes.

They are fed in this way until towards Christmas, when they are finished off for a week or two upon corn.

We are indebted to the same friend for the method of cultivating the sweet potato, a crop which he says well managed will yield three hundred bushels to the acre.

Five bushels of small potatoes are required to ensure abundant plantings for an acre.

These are bedded as early in the season as the weather will permit, in the following manner: Raise the beds—which should be not over six feet in width—some inches by throwing surface earth upon it, and six in good compost of stable manure. Lay down the potatoes upon this bed, side by side, and close enough to touch, and cover them with three or four inches of compost, and several inches of earth upon that. In due time there will be abundant plantings. This method is considered much better than the old plan of planting pieces of the potato.

When the plants are fit to be drawn out, the ground having been well prepared is laid off in furrows three and a half feet apart.

Well made compost of stable manure, yard scrapings, &c., is thrown into the drill, and furrows thrown over it from each side, making a ridge, the top of which is then levelled off with the hoe. The holes in which the plants are to be inserted are made fifteen inches apart; for this purpose a pointed stick is used, near the end of which, through an auger hole, a piece fifteen inches long is inserted at right angles, which answers the purpose both of regulating the depth of the hole to be made and of marking, by the impression of the cross-piece on the ground, the distance of the next hole. A little practice renders a hand expert in thus marking the ground. The plants are dropped according to the marks, and another hand follows to plant them. The young plants are kept clear of grass by the hoe, and between the rows, as soon as the grass starts, the bar side of the plough is run as near as possible, throwing the earth away from the ridge; in the next working it is thrown back, leaving the ridge about what it was in the beginning. During this working, the vines are laid among the ridges by hand, to avoid their being covered, and returned after the work is done. It is important that the grass be kept from about the plants by careful working during the early season of their growth.

When the crop is not consumed upon the ground, it is harvested by chopping the vine off at the surface with the hoe, and running the bar of the plough as near as it may be done without cutting or bruising them, on each side of the potatoes, when they may be easily drawn out.

They are preserved in cellars, or out of doors in kilns. The method of fixing them is to raise the ground a few inches, where they are to be placed, and cover with pine shatters to the depth of six inches or more. The potatoes are laid upon these and piled in the usual way, as many as fifty or sixty bushels. These are then covered with a thick covering of pine shatters, boards laid upon them, and earth to the depth of six inches, to be increased when cold weather comes on.

## Application of Fertilizers.

HALIFAX COUNTY, N. C.

About three years ago, I sowed, in the latter part of July, on a very poor spot of worn out land, some guano, at the rate of about 200 pounds to an acre, ploughing it under, and then sowing and harrowing in some buckwheat and rye, and afterwards clover-seed. Wherever the clover came up, I strewed thereon plaster, or gypsum, at the rate of a bushel and a half to the acre. The buckwheat I cut two months after sowing, and the rye in about eleven months. The result was, that each of the three crops was good, all having been sown at one time and on the same ground. A portion of the ground before manuring was too poor to produce a crop of any kind.

Hence it may be inferred that the success of the experiment was owing entirely to the gypsum and the guano.

Encouraged from the above named experiment, I next tried guano for wheat, on a comparatively poor soil, at the rate of 200 pounds per acre. During the growth of the crop, there was a striking difference in its appearance in favor of the parts where the guano had been applied and the yield, by actual measurement, had increased four-fold, on the clover-seed: after which I rolled the ground. As soon as the clover came up, I sowed the field with plaster, at the rate of a bushel and a half to an acre. The result was, that the clover on the part of the field where no guano had been applied was inferior, while the guanoed portion, like that in wheat, was about four times as good.

These experiments have convinced me that the effect of guano, as a renovator of the soil, is as enduring as other measures, and does not expend itself in one season, as has been heretofore supposed.

In the Spring of 1852, I instituted a comparative experiment with four fertilizers, namely: guano, bone dust, wood-ashes and clover-ley. A parcel of ground was selected which had been cropped with clover three consecutive years. After the first ploughing, I ran two deep furrows, with an opening or drill plough, seven feet apart, over the clover ley, and simular furrows over the adjoining ground, which was a part of a poor old broomsedge field that had also been previously broken up. In the two furrows next to those on the clover-ley, after filling them with earth nearly level with the surface, I applied bone-dust mixed with loam, in the proportions of four-fifths loam to one-fifth bone-dust, at the rate of a bushel of this mixture to every 450 lineal feet. At the bottom of the next two furrows or drills on the clover-ley, I applied leached ashes, at the rate of about one bushel to 150 lineal feet; and next continuing throughout the clover-ley, I strewed guano at the rate of two quarts and a pint, mixed with one-fourth part of plaster to every 450 lineal feet. At the bottom of the next two furrows or drills on the clover-ley, I applied leached ashes at the rate of about one bushel to every 450 lineal feet; and next, continuing throughout the clover-ley, I strewed guano at the rate of two quarts and a pint, mixed with one-fourth part of plaster to every 450 feet, putting [illegible] e bottom of the deep furrows or drills, in order that it might not come in direct contact with the seed corn when planted, and thereby kill the germ. Next, a bull-tongue plough was run on each side of the drills, forming another set of drills or hollows, in which I planted "Ward corn," in single kernels, a foot and a half apart. At harvest time, I found that the crop where the bone dust and guano had been applied was good, nearly equal in product, averaging about three ears to each stalk, and yielding 'by estimate,' about 60 barrels, or 300 bushels to the acre: but on the part where the leached ashes were applied, the yield was quite inferior.

I will give one more experiment with fertilizers, which, from its peculiarity, may be regarded with some interest. Last winter it was proposed that as many members of the North Carolina State Agricultural Society as might feel inclined, should deposit in one common fund $5 each, to be awarded in three graduated prizes—first, second and third—(after reserving for the use of the society 15 per cent.) to those of the number who should produce the largest yield of corn on an acre of land, which, in an unimproved condition, does not yield more than three barrels or 15 bushels—to be selected and determined by disinterested judges. Each member was to have the privilege of resorting to his own mode of cultivation.

The ground selected for my experiment, in an unmanured state, it was judged, would not have produced more than 2½ barrels, or 12½ bushels; but by the aid of guano, plaster, super phosphate of lime, and Chappells' fertilizer, connected with a light dressing of manure from the barn-yard, and stable dung, I produced 14½ barrels or 73¾ bushels of corn, valued at $62 50, and this at a cost of $20 for fertilizers and their application, to say nothing of the fodder derived from the stalks, blades and shucks, and the increased fertility of the land, from which I made a good crop of wheat and clover without additional manure. *

**Foul in the Foot.**—Caused, in cattle, by standing long in filth—may be cured by removing to a dry, clean place, washing with soap, then with chloride of lime, and applying currier's oil.

## Work for Rainy Days.

A distinguished divine in New England once preached a sermon on the moral uses of rainy days. The heavens have been preaching so much in the same strain, the past three or four months, that the topic will at least be seasonable. They have come in season, and out of season, so that the farmers who had not had forecast to provide for them, have had occasion of complaint of lost time.

The farmer, of necessity, pursues the most of his labors under the open skies; and unless he can supply his boys and men with employment, under cover, rainy days must be lost. Some, indeed, work men and cattle through all weather, but the practice is inhuman and impolitic. Both teams and men are often disabled where the practice is persevered in. Rainy days, if rightly improved upon the farm, aside from their agency in watering the earth, will be reckoned among the farmer's richest blessings. They bring to the manager of the farm a little breathing spell, when he may contemplate the progress already made in his work, and lay his plans for the future. At this season, when everything is pressing, they are particularly important. Of a dozen things that need to be done, it requires a little time to select the piece of work that will suffer by delay.

But the boys must have something to do on rainy days. Fishing should not be the invariable recreation. If the farmer has a tool-shop and work-bench, both boys and men will be furnished with profitable employment when it rains. A few tools are quite common on the premises of a Yankee farm, and the number might be profitably enlarged. The influence of the frequent use of the saw, the hammer, the bit, and the plane, in making the boy happy, is incalculable. One sees the contrast when the ignorant European laborer is put down on an American farm. He knows that kind of labor to which he has been trained, and is extremely awkward at everything else. The boy of the American farmer, if he has a work-shop to grow up in, can adapt himself to any kind of mechanical labor with the utmost ease. His arms and fingers are supple, and he becomes an adept in all that he undertakes.

This kind of physical education, which

makes a boy ingenious in planning, and skillful in the execution of his plans, is worth far more than any pecuniary fortune. It makes a man comparatively independent in whatever circumstances he may be placed. Put him down in the wilderness, and with an axe, saw, and auger, he will construct him a comfortable house in a few days to shelter his family from the storm. If he seeks his fortune in the city, he will be ready for any business that turns up; and if the best mode of conducting it is not already adopted, he will quite likely discover it.

Every farmer, then, who has boys growing up around him, should have a snug workshop well lighted, and in winter, well warmed with a stove. The building need not be a separate one. A room in the crib, carriage house, or barn may be fitted up at a small cost for this purpose. Some farmers turn their kitchen into a workshop, and here on the rainy days, manufacture their yokes, ox-whips, and whiffletrees. But this is a heathenish practice that no good housewife ought to tolerate, and we are quite sure no considerate husband will countenance it. Woman has her rights, and those which we are particularly disposed to vindicate are her rights to rule in the house. The workshop should be by itself, and order should reign throughout. There should be a tool-chest for the smaller and nicer articles—the bit-stock, and the sets of augers and bits for holes of all sizes, from one inch downwards to the smallest gimblet hole, for the planes, the fine saw, the screw driver, the tack hammer, the screws and tacks, the chissels, the rule, the spirit level, and the measuring tape.

The larger tools, the axe, saw, and augers, which are more frequently used, should have places to hang or stand, so that they may be found in the dark if necessary. Neatness and system in the care of tools and other articles, are learned only in youth. They are valuable habits, and often lead to success in life. Upon one side of the room should be a work-bench, on which boards ten or twelve feet long may be planed. It should be furnished with a vice or wooden screw in which all articles may be held fast for the purpose of using the plane or the shaving knife.

With such a room fitted up and furnished, with fifteen or twenty dollars worth of tools, the boys will never be at a loss for amusement, and the men will never be at a loss for employment on rainy days. It would pay for itself every year, aside from its influence in training the boys to skillful labor and industrious habits. If the tooth or bow of a rake is broken, John can easily mend it. If the hoe handle breaks, he has a piece of ash, well seasoned, that will make another. If the cart ladder gives out, he knows how to put in a new slat. There will be hundreds of items of expense saved every year by a work shop. With this adjunct of the farm, rainy days will be greater blessings to the farmer's sons than to his acres.

---

To the President, Secretary and Members of the Sampson County Agricultural Society.

This is to certify that we the undersigned went upon the up-lands of Everett Peterson, about the 1st of October, and measured off one acre square, and gathered, hauled, shucked and measured eighty-one bushels and ten quarts of corn, off of one Acre. Given under our hands, &c., &c. Wm. Williamson,
M. H. Oates.

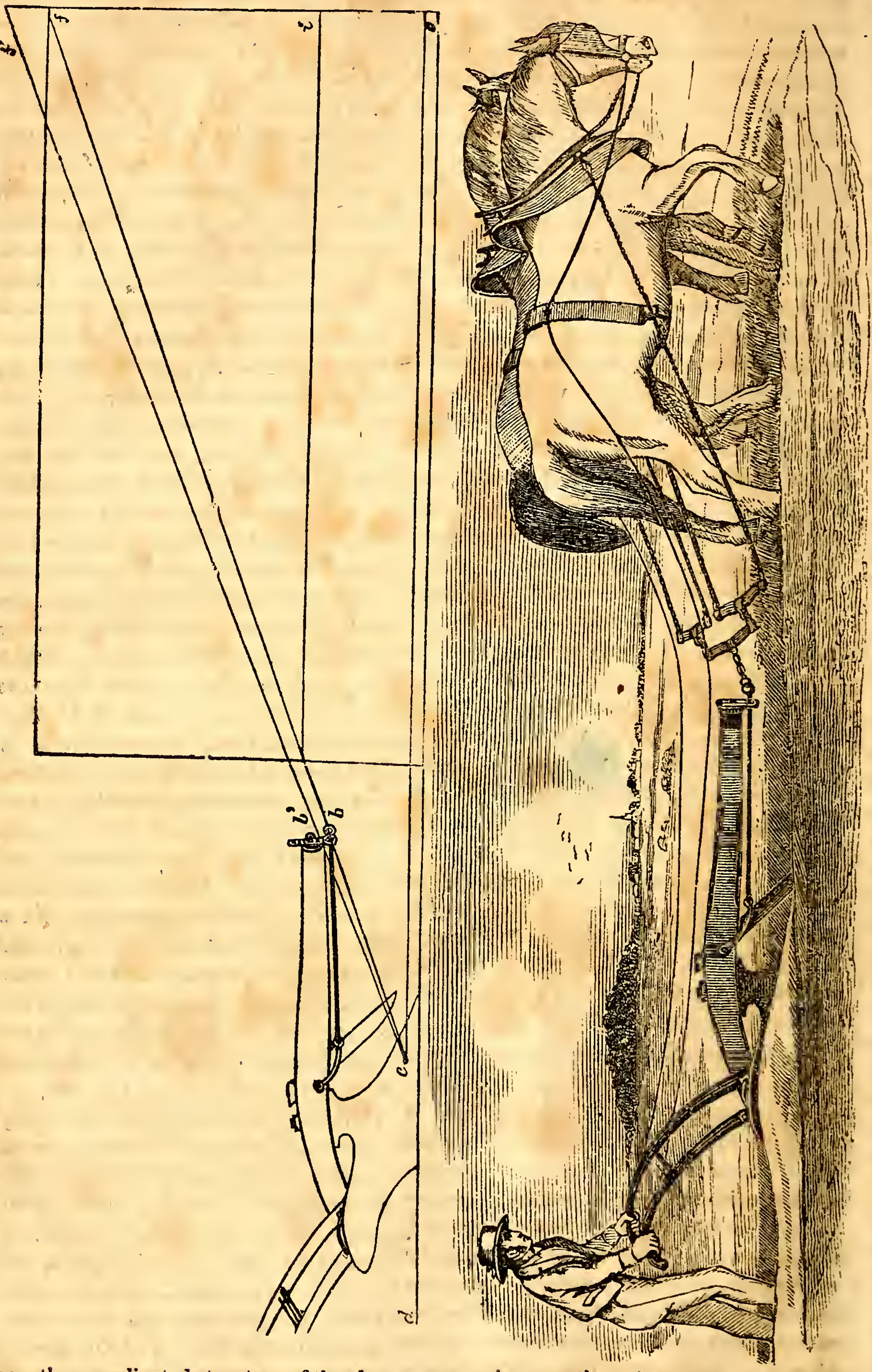
Oct. 15th, 1857.

A report of the kind of land, preparation, planting, manuring, and tending of the above mentioned acre of land.

The land was a coarse sandy soil, of a bluish gray color. I bedded it up by throwing five furrows together, four feet and a half apart, about the first of April. I opened the beds two furrows deep, and put three hundred lbs. of guano in the furrows and covered it two inches deep; planted the corn eighteen inches apart. The kind of corn planted was a large variegated corn. After it was planted I run the bar of the plough next to the corn, I then took a mixture of barn yard and stable manure of a very rough quality and strewed it in the furrows lightly, about enough to cover the bottom of each furrow. I then turned the wing of the plough to the corn and covered the manure up immediately.—It was ploughed and hoed three times, and gathered about the first of October. All of which is respectfully submitted, with one bushels of the corn as a sample.

EVERETT PETERSON.

# Remarks on Plowing.



From the complicated structure of the plow, and the manner in which circumstances oblige us to apply the draft to the implement, some misconceptions have arisen as to the true operation of the draft, and the proper manner of its application. Too little is unlerstood of the true principles of draft, to nable the plowman to attach his team and rrange the clevis so that the plow will do its work properly, and with the least force or ower. To render this subject intelligible to very mind, the following remarks are made n connection with the plate annexed.

Let *b* represent the forward end of the eam, and *c* the centre of resistance on the low, which may be assumed at two inches bove the plane of the base of the plow, *d*, *e*, hough it is liable to constant changes, from he depth of the furrows, and constant inequalities in the soil.

We have first to consider the particular orm of those parts through which the motive power is brought to bear upon the plow. t is evident that the motive force acts in a lirect line from the hook or ring at the shoulder of the animal, to the centre of resistance, nd were it not for considerations of convenience, a straight bar or beam lying in the lirection *c b*, and attached firmly to the body t *c*, would answer all the purposes of draft erhaps better than the present beam. But he draft not being the end in view, but merey the means by which the end is accomplished, the former is made to subserve the atter; and as the beam, if placed in the direct line *c* to *b*, would obstruct the proper vorking of the plow, we are constrained to esort to an indirect action to arrive at the esired effect. This indirect action is accomplished through the medium of an angular rame-work, consisting of the beam and the ody of the plow, so strongly connected together as to form an unyielding structure.—The effect of the motive force applied to the rame-work at the point *b*, and in the line of to *f*, produces the same results as if *c b* were rmly connected by a bar in the position of he line *c* to *b*, or as if that bar alone were mployed.

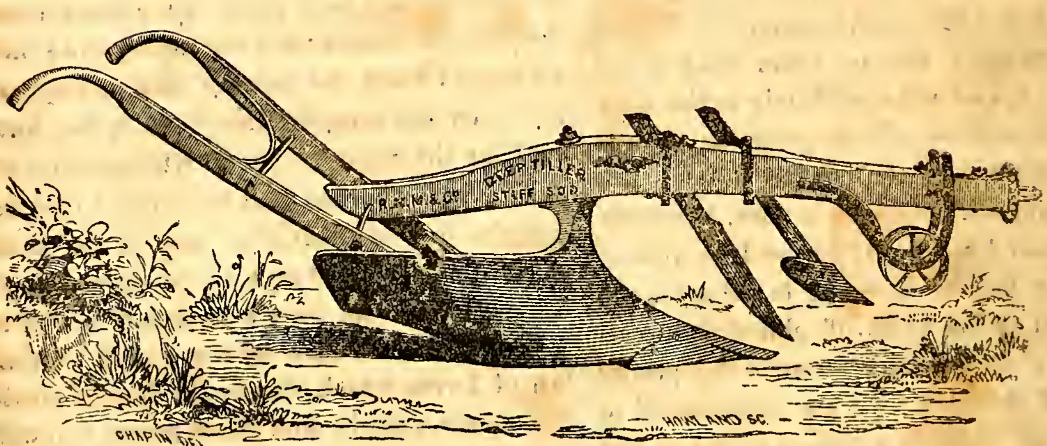
The average length of the trace chains being 10 feet, including all that intervenes between the clevis of the plow at *b*, and the orse's shoulders, let that distance be set off n the direction *b* to *f*; and the average height t the horse's shoulders where the chains are ttached, being about 4 feet 2 inches, let the oint *f* be fixed at that height above the baseine *d e*. Draw the line from *f* to *c*, which is the direction of the line of draft acting upon the assumed centre of resistance, *c*; and if the plow is in proper trim it will coincide also with the ring of the clevis; *e c f* being the angle of draft, and equal to 20°. It will be readily perceived, that with the same length of hames, the angle *e c f* is invariable; and if the plow has a tendency to rise at the heel, or run on the point, under this arrangement, it indicates that the ring at *b* is too *high* in the clevis. Shifting the ring one or more holes downward, will bring the plow to work evenly upon the base of the landside or work flat.

If the plow has a tendency to rise at the point of the share, the ring *b* is too *low*, and must be moved by raising it one or more holes in the clevis. If a pair of taller horses be harnessed to the plow, the draft chains, depth of furrow, and soil (and, by consequence, the point of resistance *c*) remaining the same, we should have the point *f* raised, suppose to *f'*; by drawing the line *f'* to *c*, we have *e c f'* as the angle of draft, which will now be 22°, and the *ring* will bo found to be *below* the line of draft *f' c*; and if the draft chains were applied at *b*, in the direction *f'* b, the plow would have a tendency to rise at the point of the share, by the action of that law of forces which obliges the line of draft to coincide with the line which passes through or to the centre of resistance; hence the ring *b* would be found to rise to *b'*, which would raise the point of the share out of its proper direction. To rectify this, the ring must be raised in the clevis by a space equalling that between *b* and *b'*, causing it to coincide with the true line of draft, which would again bring the plow to work evenly on the base of the landside, and run flat.

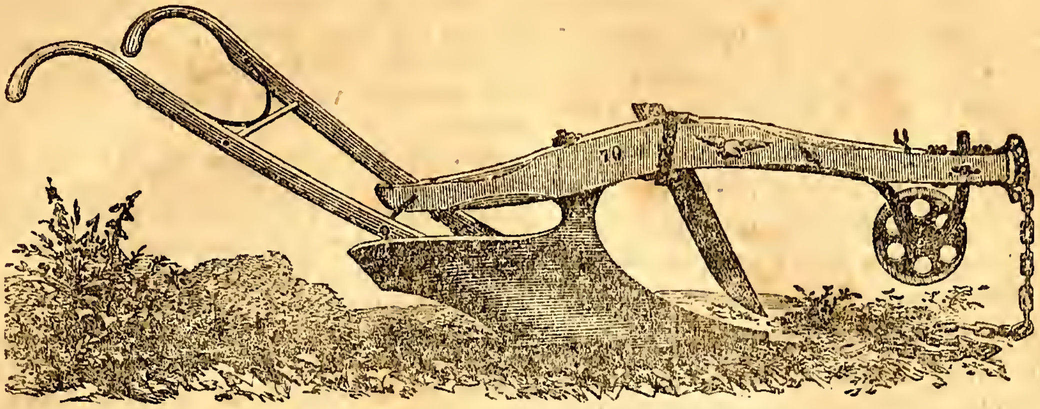
The foregoing principles are substantially such as are adopted by the most experienced plowmen, and if properly applied, will not only do the best work, but accomplish it with the greatest ease to themselves and their team. If the power (or team) is not rightly applied, good work cannot easily be done; for if the plow inclines in or out of the ground too much, or takes too wide or too narrow a furrow-slice, the plowman must exert force to direct it properly, in addition to that required to overcome the obstacles and inequalities in the soil, but if the power be rightly applied, the plow will move so accurately as not only to perform good work with more ease to both plowman and team, but, in soils free from obstruction, even without being guided.

To effect a proper horizontal movement, the clevis at *b* or draft-rod (if one is used instead of a clevis) must be adjusted and confined at that point, moving it to the right or left, if necessary. This will cause the plow to take the proper width of furrow slice, which, in sod, should be wider or narrower according to the depth of furrow, or rather the thickness of the furrow slice required; for as the thickness is increased, so also must be the width, in order to turn it easily and perfectly over, particularly when the furrow slices are required to be laid over level and side by side. The proportion in ordinary sod should be 6 by 11, 7 by 12, or 8 by 14 inches. In determining the width of furrow slice, some regard must be had to the strength of the particular sod to be turned; for the plow will turn over a wider slice in a strong or stiff sod, than when running in one more easily broken, or it will cripple and double when raised to a perpendicular position, thus only doing the work called "cut and cover."—When the slices are required to be laid at an angle, and lapped each one upon the preceding, the proportion of width should be less, or about 6 by 9 and 10 or 7 by 10 and 11 inches; for the narrower the slice in proportion to the depth, the greater will be the inclination of the slice as it is lapped upon the preceding one.

**Deep Tiller. Stiff Sod.**



This Plow has a long, narrow mould-board of a convex surface, and is specially designed and adapted to the turning of sod-furrows in stiff, stubborn clay soils. The long attenuated mould-board of No. 72½ is particularly well adapted for taking very narrow furrow-slices, two-thirds as deep as they are wide, in the stiffest clay sod; and by taking such slices the plow is adapted to prepare the lanp in the best attainable manner for fine mellow tilth, because their proportions are such as to admit the mould-board in the act of taking up and turning them, to finely sever and open the too compact parts of such stiff heavy soil. It is also adapted to take and turn furrow-slices 7 inches deep by 10 inches wide, in stiff clay sod, and set them at an inclination of 45°; and that is a position of furrow presenting the greatest attainable surface to the action of the atmosphere, and the greates cubical contents of soil to that of the harrow in preparing a seed bed. When the attempt is made to work clay sod with plows of short, wide, abruptly curved mould-boards, the furrows are too wide for their depth, and turned abruptly are broken in large pieces rather han disintegrated, they are laid over in heavy clods, and a proper pulverization of the soil cannot be obtained. This plow, by its gentle convexity and curvature of mould-board, is calculated to work bright and free in the most adhesive soil. The plow is rigged with or without the skim coulter; though this attachment is valuable because it disposes of the grass-edge of the slice, thus preventing the growth of grass between the lapped furrows, and its use is a convenience where the most finished lapped work is desired.



This Plow is designed for plowing stiff soils, 6 inches deep by 9 inches wide. It is a light pretty plow, and does very accurate work. It is an excellent stubble or old ground crossing plow, covering the stubble effectually and leaving the land light and mellow. In stubble it works from 4 to 7 inches deep by 9 to 11 inches wide, and is of very easy draught for a span of horses.

◆

## Patent Office.—Agricultural Operations.

POTATOES.—Mr. C. E. GOODRICH, of Utica, New York, (the author of an essay on the diseases of the potato published in the Agricultural Report for 1852,) has communicated to the Patent Office the satisfactory results of a series of experiments conducted by him with a view to obtaining new and healthy varieties of potatoes from the old stocks by means of seeding, together with some valuable instructions respecting the cultivation of seedling potatoes. He states that an ounce (troy) of potato seeds contains about seventy-two thousand seeds, and that one thousand are as many as any experimenter will have need to sow, as from them he may be sure of from two to eight hundred plants, one half of which appear sufficiently well at the first autumnal digging to be saved for further trial. The persons most likely to do justice to such experiments, Mr. Goodrich thinks, are amateur cultivators and intelligent market gardeners; though he looks upon the chances for success as but limited in any case, because of the lack of patience and watchfulness on the part of those essaying the task. The particular directions contained in his circular, however, will no doubt serve as a reliable guide to such as shall give the subject due attention.

The potato originated in mountainous regions of the South, and therefore requires less heat than most other tropical plants, but cannot be healthy when exposed to protracted cold and moisture. Continuous propagation from the tuber must induce deterioration, and the effort to reinvigorate by stimulating the soil, but tends to develop the vine and to render the tuber watery and unwholesome. A loam soil is better adapted to this plant than either a clayey or sandy soil, especially when fresh and enriched by woody matter. Hilly grounds, with northern and western exposures, are also desirable. Large tubers, though not the most prolific in proportion, produce the best potatoes. It is well to plough and plant deep, except in very heavy wet soils. High hills are not good because of the frequent heating and chilling to which they are subject, and wide planting is desirable that the hills may not be too much shaded. It is best to plant early, and to give good time for developing. Frequent renewal from the seed-ball is, however, generally to be regarded as essential to the preservation of healthy plants.

◆

From the Montgomery Mail.

## Prices of Cotton.

Notwithstanding the opinion of many experienced men to the contrary, we cannot help thinking that if cotton planters will not press their cotton too rapidly on the market, but hold back for a reasonable period, the price will materially advance within less than ninety days.

There is so much uncertainty in the calculations of even the oldest and wisest cotton dealers, as to the price of the article, that we do not wish any person to act upon our opinion, but every one to act only upon his own faith founded on a calm and intelligent view of existing facts. We, however deem it proper, in support of our opinion, to submit to cotton planters the following considerations:

1st. The sole cause of the great fall in the price of cotton, is the financial revulsion and panic which commenced about three months ago in the United States, and very soon afterwards spread over the principal European nations.

2d. The commencement and spread of that revulsion and panic in the United States was well calculated to produce, and doubtless did produce, upon the European mind, the firm belief, that the revulsion of 1857 would produce the same disastrous results that were produced by the revulsion of 1837, and that it would require as many years to recover from the revulsion of 1857 as it did from that of 1837.

3rd. That belief operated to anihilate confidence all over Europe, and gave rise to the calculation, that American cotton growers were unable to hold their cotton and would have to take for it what the mercy or generosity of European capatalists might induce them to offer.

4th. That belief will be of very short duraation: for already the New York and New England Banks have resumed specie payments; and three great cotton States (Alabama, Georgia and South Carolina,) have legalized the suspensions of specie papments on the part of their suspended Banks, until next November. The combined influence of resumption at the North and legalization of suspension at the South, will soon dispel the delusive belief of European capitalists and manufacturers; and convince them, that there is not an ability at the North generally and on the part of many of the South Carolina and Alabama Banks, to maintain specie payments, but a *determination* on the part of the people of the cotton States to do all in their power to enable the Banks in the South to assist the people to hold their cotton for better prices. The news of the resumption of specie payments at the North is, likely, by this time in Europe. It will astonish the European nations. So early a resumption was not expected by the Europeans; and we believe the effect of that news will speedil lead to a revival of confidence in Europe, and to a material improvement in the price of cotton.

5th. Another delusion in the European mind will soon be dispelled. That delusion is the estimate of the crop of 1857 at 3,250,000 bales. All well informed men in the South now know that the crop cannot reach 3,000,000 bales: and the belief is becoming very general that it will fall considerably below the crop of 1856. The lateness of the spring kept cotton from maturing early.—The numerous and heavy rains in the fall and winter and the frosts of October and November, destroyed so many bolls and so much cotton as to render the crop at 3,000,000 bales an incredible calculation, and a crop considerably below that of 1856, a high probability.

6th. In support of the above views, the following facts are given: Already the decrease in the receipts at all the ports as compared with last, is up to 400,000 bales. The stock in all the ports is near 180,000 less than at the same time last year. The stock of American cotton in Liverpool, on the 4th of December, 1857, was over 78,000 bales less than at same time last year. It is said and believed, that the stock of American cotton in the hands of manufacturers in this country and all others is exceedingly light, and very greatly less than at the same time last year; and that in consequence of the high prices for the last eight months preceding the revulsion in October, and the consequent diminution of the quantity manufactured, the stock of manufactured cotton goods in the world is not large but light.

It seems to us, that the supply of cotton will not be equal to the demand, as soon as confidence is restored. There is a necessity upon the world to have cotton. And when we see *the prices now more than two cents per pound lower in this country than they were a year ago*, we think the matters above stated justify the belief, that cotton must soon rise in price—especially if cotton planters will follow the course dictated by their own interest.

*From the Southern Planter.*

## To Clear Steep Land.

By standing on the lower side of the trees they may be handily cut near the ground, on the upper side. Begin to clear on the lower side. When a tree is felled, cut off the limbs, and it will roll to the bottom. Much of the brush will also be tumbled into the general pile by the logs. In this way at least five times as much clearing can be done as in the usual mode.

ZA. DRUMMOND.

*November*, 1857.

N. B.—If you have any business below, send a lazy man about it, and if he gets killed by a log, not much difference. Z. D.

# Editorial.

## RALEIGH, JANUARY, 1858.

### Our Debut.

We have the pleasure of presenting the citizens of North Carolina with the first No. of the "NORTH CAROLINA PLANTER." Various circumstances have conspired to delay its appearance much beyond the time anticipated; but now that we have surmounted most of the difficulties incident to all new publications, we expect to issue the future Nos. in good time.

We esteem ourselves peculiarly fortunate, in being able to give in our first No. so much valuable practical information, from the pens of several of the most intelligent and enterprising Planters of North Carolina. The interesting articles from Dr. W. R. HOLT, of Davidson, describing the manner, &c., of cultivating the fields of Wheat, on which he received the highest premiums at our late State Fair, cannot fail to edify all our readers. The excellent paper, on the 'Rotation of Crops,'' by Hon. A. W. Venable, will be highly valued, on account of the amount of important information communicated. The article on "Hog feeding and the Sweet Potato Culture in North Carolina," was written by one of the shrewdest and most judicious Farmers in Hertford county, and is upon a subject which ought to command the best attention of our Planters. The article from W. F. LEAK, Esq., of Richmond county, on the Chinese Sugar Cane, contains a vast deal of information upon the cultivation of this plant which is occupying so much attention at the hands of our Agriculturists.

Beside these leading papers, a large number of other articles are embraced in the pages of this No., which will be found interesting and profitable to all our citizens.

We have received aid from several intelligent Farmers, in supplying the Editorial Department of this No. of the Planter, but none of them have yet consented to have their names announced as associated in this connexion. We hope soon to do so, however: and in the mean time we have assurances of contributions to the Editorial columns, from those "competent to teach," that justify us in saying, this Department will be well filled.

We have been especially fortunate, in securing the services of S. W. WESTBROOK, Esq., of Guilford, in conducting the Horticultural Department of the Planter. This gentleman is so well known, throughout the entire South, as one of the best Gardeners and Orchardists in the Union, that it is only necessary for us to say he is to manage these departments, in order to secure for them the confidence of all. His Department is well filled in this No.—See Horticultural Department.

We design portions of the Planter to contain matter of interest to the MECHANICS of the country, and earnestly invite their support, and their contributions to its columns.

We have also a Department on "Domestic Economy," which we design making especially interesting to the LADIES who may honor us by perusing our Planter—and to Housekeepers generally.

☞ We have now struck the *Ploughshare* into the hazardous soil of *Experiment*. We know that other Periodicals, having the same objects in view as the Planter, have lived, or rather breathed, for a short time, and then gone down. *This shall not be the case with the North Carolina Planter*, if industry, energy and enterprise can enlist the support of North Carolina Planters. It has now the entire field to itself—the "Cultivator" and "Arator" both having surrendered in our favor. Surely the Formers and Mechanics of North Carolina will support *one* paper in the State, especially devoted to their interests—and SUPPORT IT WELL! We believe they will—and acting on this belief, we earnestly solicit their aid and co-operation in making this a first class journal.

### Our Illustrations.

We give in this No. an interesting article "On Ploughing," which we have illustrated by cuts of some of the most approved Ploughs, and illustrative of draft power, &c. These Ploughs are of the Ruggles' patent, and have been demonstrated by many of our Planters as being admirably adapted to the uses for which they are designed. We hope to be able to give a greater variety of illustrations in our February No.

☞ We send this No. of the Planter to many persons who are not subscribers, hoping they will be sufficiently pleased with it, to forward the money ($1) and become regular subscribers. No other No. however, will be forwarded to those who do not send on the subscription price, as we are compelled to adhere to the cash in advance principle, in order to place the Planter on a permanent basis. We hope therefore every one who shall receive this No. will subscribe himself, and interest himself to procure his neighbors to subscribe also.

## To County Agricultural Societies.

We offer the "North Carolina Planter" to all the County Agricultural Societies of the State, as a medium of communication to the public, and to the members of their Societies. We hope to have the Planter extensively patronized in every section of the State, and it will afford us great pleasure to have something in every No. of especial interest to every section. And the only way to accomplish this desirable end, is to have contributions from gentlemen residing in every part of the State. Almost every man can write a short account of his experience in some interesting department of Agriculture—and it is the best way to receive and impart instruction to one another. We hope to have our pages well filled every month, with communications of this kind.

## Agricultural Fairs.

We noticed with much pleasure, during the past Autumn, the various accounts of Agricultural County Fairs, held all over our State. As one of our State papers then observed, we now say, we heartily wish that they may continue the rage for a long time to come; for they not only excite emulation and lead to improvement in agriculture, stock, mechanics and house-wifery (fully as important to comfortable living,) but they bring people together under most agreeable circumstances, making and perpetuating acquaintances and friendships.

☞ If you intend to subscribe for the North Carolina Planter, commence with the first No.

## Contributions.

Upon determining to commence the North Carolina Planter, we addressed letters to several gentlemen of our State, urgently requesting them to contribute something, from their knowledge and experience, with which to occupy a portion of the first No. Several responded nobly, others wrote us words of encouragement, while from others we have heard nothing at all.

Now, in order that an Agricultural paper may be of service to those for whom it is intended, it is indispensable that those interested in such an enterprise shall contribute of their fund of information, be it much or little, to impart information to one another. The Editors, be they ever so competent, cannot possibly teach on all subjects, or embrace in their Editorials all matters upon which the Planting community want light. But if A, B, C, D, &c., shall give their views, experiments, successes and failures on such matters as they may choose to write upon, a great variety will be given, much valuable information communicated, and all will be benefitted. We do hope to receive such aid to the North Carolina Planter. And we earnestly call upon all to furnish us with such articles as they may be able to prepare for its pages.

## The Cash Principle.

When first deliberating about publishing our Agricultural journal, we addressed letters to several Editors of agricultural periodicals, asking their views upon such publications; and the unanimous reply was,—"Be sure and begin with and stick to, the cash in advance principle—by none other can you hope to succeed." The experience of the Publisher of the PLANTER fully corroborates this statement—and we believe subscribers will like this plan the best. We shall, therefore, adhere to it rigidly.

We want five thousand subscribers to begin with—and we want them all to send on payment in advance. If these two wants can be realized, we have no fears about being able to present the people of North Carolina with a journal equal to any Agricultural paper published in the Union, at the same price. Send on and subscribe *at once*. Don't delay.

## Our Predecessors.

W. D. COOKE, Esq., Editor of the "Carolina Cultivator," having discontinued the publication of that journal, has transferred to us his list of subscribers. To those who *have paid* for the current volume of that paper, the numbers of the N. C. Planter will be furnished, sufficient to amount to twelve Nos. of the "Cultivator" to which they were entitled. To those who have *not paid* for the current volume of that paper, this No. of the Planter will be forwarded, when if they forward to A. M. GORMAN, Publisher of the Planter, the money due on the Cultivator up to January, 1858, the requisite Nos. of the Planter necessary to constitute a volume of twelve numbers, embracing those of the Cultivator already furnished, will be sent. But the Planter will be sent to those *only* who forward money to pay up arrearages due the Cultivator, or the cash for a full volume of the Planter.

We hope to retain all the subscribers to the Cultivator for the "Planter"—but we have determined to adhere strictly to the cash in advance system; therefore all who desire our paper must send the cash in advance.

## To the Subscribers of the "Carolina Cultivator."

The undersigned has made arrangements with A. M. Gorman, Esq., to take the list of subscribers to the "Carolina Cultivator," and continue the publication of an agricultural paper, under the title of the "North Carolina Planter."

All those who have paid for the current volume of the "Cultivator" will be supplied with the "Planter" without charge, until the time for which they have paid expires.—The bills of those indebted to the cultivator have also been transferred to Mr. Gorman.

It gives me great pleasure to recommend the "Planter," not only to all the patrons of the Cultivator, but to every farmer in the State. The low price brings it within the reach of every one. WM. D. COOKE.

Raleigh, Jan. 27, 1858.

☞ The following Notice, from the Editor of "The Arator," fully explains itself. We shall send this, the first No. of the "North Carolina Planter," to each of the subscribers of the Arator, hoping they will be sufficiently pleased with it to remit us, at once, one dollar, and become subscribers. No other No. will be sent, except to those who forward the subscription price. For one dollar, they will be furnished with the Planter for one year. Send on immediately, before the February No. is issued, which will be in about two weeks from the receipt of the January No. But to the card of Mr. Lemay:

## To the Subscribers to the Arator.

Having discontinued the publication of the ARATOR, and being anxious to see a better work of the sort printed in the State, I have transferred its subscription list to A. M. GORMAN, Esq., who is about getting up a first class agricultural journal in this city, and will send the same, bearing the title of "THE NORTH CAROLINA PLANTER," to every name on the said list.

I heartily recommend his enterprise to the patronage of my old friends and subscribers, and hope they will, one and all, give it their cordial support. The ability, industry and fidelity with which Mr. GORMAN has long conducted the Spirit of the Age, furnish a sufficient guarantee that he will make the PLANTER also a valuable and an interesting journal.

The importance of sustaining a North-Carolina Agricultural paper—devoted and suited to the peculiar circumstances, soil and climate of North-Carolina—is too obvious to, and deeply felt by, North-Carolina Agriculturalists, to need comment. It is, therefore, hoped that the whole State will contribute cheerfully in the aid of this patriotic effort to give to the public this *desideratum*.

THO'S. J. LEMAY.

Raleigh, Jan'y 15, 1858.

## Our State Fairs.

We remember noticing, some months since, a spicy and well-directed Communication in the Raleigh Register, over the signature of "Subsoil," in which the writer discusses the question of—"how shall our people be brought to feel the deep and abiding interest which they certainly have in our State Fairs?" And he then proceeds—"The answer is very plain;" and observes that such attractions must be offered, as will bring together our fellow-citizens from every nook and corner in the State. But the ability of the Society to offer these inducements, by presenting attractive premium lists, is out of the question, unless receiving aid from some other quarter than the ordinary proceeds of the Society.—But, says the writer, "let our Legislature come up nobly to the rescue; let it appropriate say $5,000 annually to the State Agricultural Society, to be used as a "premium fund" to be distributed annually to the producers or exhibitors of the best specimens of "live stock" and articles of superior merit. Let this be done, and the friends of this good cause will at once begin to breathe deeper and more freely. This sum, added to the ordinary receipts from other sources, would enable the society to offer an array of premiums sufficiently attractive to elicit competition from all parts of the State—from the mountains to the seaboard."

These suggestions are in the right direction, and we hope will meet with a consideration commensurate with their importance. *All* North Carolinians, from every portion of the State, ought to be interested in this great enterprise, and to no other uses could this small portion of the State's money be applied more beneficially for all, than in thus endeavoring to develop and concentrate the industrial interests of our people. We shall have more to say on this subject at a future day.

## Chinese Sugar Cane.

The interesting communication from W. F. Leak, Esq., in this No., will give our readers much information on the cultivation and management of this plant. A diversity of opinion has existed as to whether Sugar can be made from the Chinese Sugar cane, and the experiments of many led to the conclusion that it was impracticable. Later demonstrations are changing these opinions. A gentleman of this City informs us that he filled a jar with syrup last fall, which has since granulated and is now a solid jar of sugar.

Dr. Augustus Hayes, of Boston, Assayer to the State of Massachusetts, who has heretofore expressed the opinion that the sugar of the Chinese cane would in no case granulate and yield pure cane sugar, has subsequently made further examination of his samples of syrups, and, to his surprise, found that large masses of actual cane sugar chrystalzed had formed in them. The samples of glucose, which Dr. Hayes had in his possession, turned into crystaline sugar by simply standing a certain length of time. Efforts have been heretofore made by chemists, but without success, to obtain crystal sugar from glucose, hence it was concluded that such a conversion of it was impossible. The chemical change refered to, Dr. Hayes announces to be some thing entirely new, and that it will greatly enhance the value of the Sorgho.

H. C. Bulkley, of Kalamazoo, Michigan, has made a successful experiment upon a new plan of extracting Chinese cane juice, and recommends it to others, as it saves the cost of a crushing mill, and enables parties provided with ordinary farm implements to make a full supply of syrup for family use at a very little expense.

The plan is to cut the canes in a straw cutting machine, and then steam them until quite soft and press out the juice in a common cider press and then proceed with the evaporation as with maple sap. Boiling the cut canes will answer where no conveniencies for steaming exist, though steam is preferable, and an ingenious man can make a steamer out of a cask, an old gun barrel, a common kettle with a wooden lid cemented tight with clay and cow dung mixed into a paste. But, after all, if the steaming process should prove more economical than grinding the green stalks, it will be found preferable to erect works designed for the purpose especially.—Mr. Bulkley says that he found the stalks dry enough to burn, in a small cider press, while they were hot, and made twenty-five gallons of syrup, by the work of two men and a boy, in two half days.

The U. S. Agricultural Society have awarded a large silver medal to Joseph S. Lovering, of Philadelphia, for the care with which his experiments have been made, and the samples of sugar obtained from Chinese sugar cane, presented by him. The society, through its committee, however, declared that they did not wish to be understood as certifying that the manufacture of sugar from the plant in the Northern States is as yet demonstrated to be more profitable than any other crops. Mr. L.'s samples were as follows: A sample of clear brown sugar from that made on an acre of land, which gave 625½ lbs. of sugar, and 123½ gallons of molasses; a second sample of brown sugar, very fair, at the rate of 1221 85 lbs. per acre; a third of white sugar, several degrees lighter than what is known as clayed Havanna, equal to No. 1 coffee sugar, and a fourth sample of pure white chrystalized sugar, equal, as Mr. L. claims, to be the best sugars anywhere made.

## Our Cover.

We had designed issuing each No of the North Carolina Planter with a handsome cover—but several gentlemen have written us on the subject, and have induced us to change our minds in this particular. We give an extract from a letter, which will explain perhaps better than any remarks of our own would do.

"Mr. Gorman: I send you the names of twelve subscribers to your proposed North Carolina Planter; and when your first No. is out, I expect to quadruple the list at my office. You will pardon me for suggesting a little change in the manner of getting up your monthly numbers. You propose giving *each* a handsome cover. Now I would suggest that instead of giving each No. a cover, that you defer it till the close of each volume, and that you then furnish a stout, substantial cover, sufficiently large to bind the twelve numbers together in. This will furnish us who live remote from a Bookbinder, to have the volume neatly stitched and bound, at home. This will be a great convenience to your country subscribers, and can be no disadvantage to any one. I hope this suggestion will meet your approval."

The suggestion of our correspondent strikes us as a good one,—one that will suit our subscribers better than covers for single numbers. We shall therefore adopt it, and at the close of each volume, present our subscribers with a handsome, substantial cover, suitable for binding the entire volume in.

Going Away.—Mr. J. B. Cox sold his plantation, near Newton Grove, in this county, a few days since to Mr. Henry Hodges of Duplin. Mr. Cox is now removing his force to Alabama. Mr. Jonathan Carr, sold his plantation to James Vann, Sen. Mr. Carr goes farther South. We hear of several other plantations for sale. The present hard times, begets a restless spirit in the minds of the people, and it will probably cause North Carolina to lose many of her best citizens.
*Clinton Independent.*

And thus we are losing some of our most intelligent and enterprising citizens, who are leaving their birth-places, the circle of relatives and friends, where they have enjoyed homes, health, and thrift all their lives—to go in quest of new homes, amid new scenes, new people, and untried climates; and, as is often the case, ere they have comfortably located themselves, the hand of disease is laid upon them or their families, and they are bereft of that greatest of all earthly blessings—good health. Themselves or their loved ones are laid low in death, and with broken family circles many have to return to the salubrious clime of good old North Carolina, to save the lives of others of their families.

The truth is, well directed industry and energy are as well paid in North Carolina as any where else, taking into the account the advantages we enjoy; and our people, in very few instances, mend their condition by removing from her borders. Better stay at home—where, by industry, frugality and contentment, they may enjoy themselves as well as in any place under heaven.

## Harness Galls.

Nothing looks worse on that noble animal, the Horse, than red and inflamed galls made by hard and badly fitting harness.—"The merciful man is merciful to his beast," and it is a species of heathenish barbarism to drive a beast with hard leathers and chains rubbing and pressing upon a sore that would cause the hard hearted driver, if he was placed in the dumb brute's place, to scream with pain. It is miserable economy to use a poor harness, and if such were abandoned, a fewer number of unsightly sores would offend the eye of the humane man than at present. The collar, above all, should be of the right size and of the best quality and construction. It should be frequently cleaned with warm water and oiled; and an occasional pounding will help to keep it pliant and in good shape.

Galls are sometimes caused by putting horses to hard work in the Spring after a winters' rest. Where the horse has had a long period of rest, his shoulders should be hardened by bathing them in a solution of alum and whiskey for a week before his labors are to begin. This preparation, diluted with water, does well at any time whenever the skin seems tender.

Salt and water to bathe the shoulders once or twice a week, at night, and wash off with cold water in the morning, is held in high estimation by some as a preventive of galls.

When the skin is broken and deep sores result, some make use of white lead and linseed oil with good success. According to our experience, however, in curing up sores on horse flesh, there is nothing equal to a wash made by boiling together water and Pleurisy Root.(*Asclepias Decumbeus,*) known also as butterfly weed, flux root, &c., with which to cleanse the wound, and afterwards cover it with a fine powder of the same root. Its effects are magical.

## Sheltering Cattle.

Some farmers seem to think that a cow is capable of enduring all sorts of weather and still yield an abundance of milk and butter and keep up fat. Well, from the way they stand drawed up during these cold January rains, one would think they could endure anything, sure enough. Now, farmer, if your cows are out in the field or the yard shivering in the cold, you ought to be heartily ashamed of yourself, and the butter you eat ought not to melt in your mouth! Go build a shelter under which they can gather and chew the cud of contentment; and thou shalt be rewarded with an abundance of milk and butter, fat cattle in the Spring and a quiet conscience all the time.

Book Farming.—A cotemporary says: One of the most practical causes of book farming that has come to our knowledge is told us by a friend. A young farmer, a reading man and a working man, got hold of Leibig's great work on agricultural chemistry soon after its puplication, and became convinced of the propriety, notwithstanding that his farm was limestone land, and of making a fresh application of that fertilizer. After a good deal of hesitation on the part of his father, the lime was tried, and after being tried continued. The improvement in consequence has been such, that where five and six barrels of corn was the outside, as much as fifteen per acre have been made, and other crops in proportion. A debt, the interest of which they could scarcely keep down before, has been paid off, and they have bought field after field with ready money from neighbors who could not afford to buy lime, or agricultural books.

## Land for Agricultural Colleges.

A bill has been introduced into the House of Representatives by the Hon. Mr. Merril, providing for a distribution of public lands to the several States for the purpose of establishing agricultural colleges, giving twenty thousand acres for each Presidential elector to every State. These States which have no public lands, within their boundaries, will receive land scrips, which cannot be located in any other State, but may be so located by any individual purchasing the script. The interests of the fund must be devoted to the maintainance of agricultural colleges and to nothing else. A limited amount can be appropriated to the purchase of model farms, but not to the erection of buildings. Every State which accepts the trust must bind itself to protect it against contingencies. There are some four hundred colleges of this character in Europe, sustained and conducted wholly or in part by government, and a desire to follow their example seems to have been awakened simultaneously in different States. The agricultural college of Michigan was the first one established on this continent, and is now in very successful and useful operation, with more than one hundred students. There have been some organized in New York, Pennsylvania and Maryland. Virginia has also taken some steps towards establishing one in the Old Dominion. Mr. Merrill's bill has the merit, in addition to the aid it extends to agriculture, of giving to the older States a share in the distribution of public lands.

We have received from the President of the Agricultural College of Michigan, the following letter, which will be read with interest by all who desire information on this subject:

Agricultural College of the State of
Michigan,
Lansing, January 4th, 1858.

*Publisher of the N. C. Planter:*

You doubtless have perceived that the Bill of Mr. Morrell, designed to appropriate lands to the several States for the purpose of establishing Agricultural Colleges, has been referred in Congress to the Committee on Public Lands. Various memorials on the same subject have been presented. Mr. Merrell's Bill may not be the best, it may be deemed advisable by the Committee, so to modify the Bill, as to make area as well as population, the basis of distribution. Mr. M.'s Bill embraces guarantees, that a State accepting the trust, shall keep the fund entire and sacred. It allows the interest of the fund only to be used, and it forbids the use of the fund in the erection of buildings. Where States have no public lands within their limits, it allows scrip to be issued for the quantity due such State, providing, however, that no State as a State can locate and have lands within the boundaries of another, but individual purchasers of scrip can locate anywhere. Perhaps any bill ought also to prohibit the sale of scrip by any State at less than $1,00 per acre.

There seems to have been a simultaneous attention aroused to the whole subject over the country. Ours, I believe, is the only Institution of the kind in actual operation; it opened on the 13th of April last. So far, it has been successful. We have now about 100 students in attendance, The resources of the Institution were $96,000. Our farm consists af 676 acres.

The Agricultural College of New York it is designed to open, next year. Their resources are about $80,000. They are erecting a building which will accommodate 300 students. One half the sum named was raised by subscription, and one half was loaned by the State.

The Farmer's High School of Pennsylvania, they propose to open next year. They are erecting buildings which will accommodate 300 students. The Institution feels that $100,000 is secured—one half from private subscriptions, one half from the State. Their Farm consists of 400 acres, 200 of it a donation from Gail Irwin, at Bellefonte, and 200 in possession, under a conditional sale.

In Maryland, private individuals have subscribed $50,000, and the State is pledged to pay $6000 per annum.

In South Carolina a plan is on foot to create a College by 1000 subscriptions of $100 each.

In Virginia, public spirited citizens have founded a Professorship at Charlottsville, and purchased an Experimental Farm near Petersburg.

In Iowa, Wisconsin and Ohio, Bills have been introduced into the respective Legislatures to establish State Agricultural Colleges, but have failed.

Agricultural Professorships have been established in many of the old Colleges of the country

In times past, Michigan, Illinois, and two or three other States have asked an appropriation by Congress of Public Lands for the purpose in question. So has the United States Agricultural Society.

These are some of the evidences that general necessity has aroused the public mind to the propriety of such a grant. The donation lands for purposes of Education has become the recognized policy of the Government. It appears from a Report of the Sec'y of the Interior in 1854, that more than 4,000,000 of acres had been granted to Universities and high Seminaries of learning. Surely, if it is legitimate to grant lands for the promotion of Classical and Professional education, it surely is to do so for the promotion of education bearing directly on the industrial and agricultural pursuits of the people. It appears, also, that nearly 50,000,000 acres had been granted for Public Schools. No demand that the States would now make, would exceed 1 per ct. of our great public domain.—Even Pres't Pierce's veto of the Indigent Insane Bill in 1854, concedes that grants of lands for purposes of education are Constitutional.

The friends of the measure in hand believe that it only needs concert and prompt action to secure the passage of a bill this very session.

Will you, in the next number of your Periodical, arouse public attention to it in an earnest article, and send a number to each of the gentlemen composing the Committees on Public Lands and Agriculture, in both House and Senate at Washington.

Will you ask your State and County Societies to make themselves heard at once, at Washington, on this subject.

Will you bring all the personal influence you can, to bear on individual members of your delegation in Congress? I should be pleased to hear from you in response; and, also, to receive an extra copy marked, if you contribute your aid in the matter.

I remain yours,
J. R. WILLIAMS, Pres't,
Of Mich. State Agricultural College.

◆

A Wrinkle about the age of Horses.—The editor of the Southern Planter says:

'The other day we met a gentleman from Alabama, who gave us a piece of information as to ascertaining the age of a horse, after it has passed the ninth year, which was quite new to us, and will be, we are sure, to most of our readers. It is this: After the horse is nine years old, a wrinkle comes on the eyelid, at the upper corner of the lower lid, and every year thereafter he has one well defined wrinkle for each year of his age over nine. If, for instance, a horse has three wrinkles, he is twelve years old; if four, he is thirteen. Add the number of wrinkles to nine, and you will always get it. So says the gentleman, and he is confident it will never fail.'

◆

What a delightful world this would be if all its inhabitants could say with Shakspeare's Shepherd: "Sir, I am a true laborer, I earn that I get and get that I wear; owe no man hate, envy no man's happiness; glad of other men's good; content with my *farm.*"

## The Farmer.

What a sovereign man is the intelligent, industrious farmer. Within his own realm of earth, he wields a sceptre to which all must bend. The balance of the world's life and comfort he holds in his stalwart hand. Neither courts, nor camps, nor armies, nor fleets can exist without his aid. He is the feeder—aye, and the garmenter, virtually—of the race. Cities spring from the traffic in the products of his industry Commerce is born at his behest. Of the State he is the "first estate." Lord of the land, no man has firmer hold of the essential title of nobility. And he need be no plodder because he is a farmer. The day is past when the soil tiller was confounded with the clod turned by his plough. The soil is his servitor; he smites it, and lo! the harvest comes forth. The hoe and the sickle make him music braver than dulcimers, and sound the march of a triumph, grand as it is peaceful and blessed. But he is not forever in the furrow. For him are broadest fields of study—fairest fields of delight. For him are honors linked to beauties and wisdom; for him, periods of communion and rapture, of which the birds, the flowers, the streams, the stars, and all wondrous things of the universe may bear witness. A brave man art thou, wielder of the mallet and the plane; and thou, skilful worker of webs; and thou, deviser of all machines whereby the labor of man's hand is speeded or abridged. But ye are all second to the farmer. He is master of the needfulest of toils, and the most serviceable products. He can live without you, but you cannot exist for a day without him. Honor to the farmer; may his sphere widen and his stature be exalted. And honor to all honest toil, for of such are the fruits that form the crowning glories of the world.

◆

## Steam Cotton Press.

Cotton is a loose fibrous material occupying a great amount of space, and it would never do to export it in the loose state, because the amount of the freight would then be of more consideration than the value of the cotton itself, so the method of packing it by means of presses has always been employed in cotton exporting countics. The aim of these presses is to make the fibres lie quite close together with no air between; so far is this condensing process carried, that cotton in the bale is often only one-tenth of its original bulk.

These presses have been first, the old screw press, which was replaced by the hydraulic one, and now the steam press is gradually gaining ground, and it is an improvement on this last kind that has been invented and patented by John Roy, of New Orleans. This invention consists in economizing the steam so that all its power is extracted before being blown away. This is done by the use of three steam cylinders, one being much larger than the other two, and having arranged them so that a progressive power is obtained. By this means the smallest amount of power is used at first, which gradually increases as the size of the bale decreases; in other words, his press supplies the power into the ratio in which it is required.—*Scientific American.*

◆

## Remember Home.

Fortunate, unspeakably fortunate, is the young man that has a home that he loves, and dear ones nestling there to whom his heart goes out in immeasurable yearnings of affection. The youth who has come to the city to seek his fortune is guarded as by an angel from Heaven, when he carries fresh in his memory the picture of an humble cottage home which shelters the dear and venerated being who gave him birth. The thrill of her loving touch, as she laid her hand upon his head in blessing, ere he turned his footsteps toward the great city, shall hold him ever in the Path of Life, and charm the Tempter away. And still more blessed is he if he has to devote a portion of his wages to the support of that home, of these dear ones whom he so loves. In such a case, his earnings are hallowed with a sacredness which communicates itself to his character, and is exhibited in blossoms of duteousness. The conciousness that the wages gladden, and beautify, and make comfortable the home of his childhood, and the authors of his being, gives a dignity to his labor, and a delight in its rewards, such as no more selfish spirit of acquisition can impart. Therefore, O ye young men, remember your paternal homes and devote at least a portion of your earnings to the making of them brighter and happier, that your own life-path may be brightened by effulgence which is ever radiated from good deeds.

# Horticulture.

**S. W. WESTBROOK, EDITOR.**

## Editorial Debut.

In accepting the Editorial chair in the Horticultural department of the North-Carolina Planter, I am aware of the responsible position that I am assuming to the interest of our Southern people, and at the same time my inability to perform the duties incumbent upon one of much higher qualifications than myself. And much more so, when I reflect that the inestimable treasures and beauties of nature, to a great extent, can only be developed by the application of scientific principles. And while I am conscious of these facts. I flatter myself that the friends of Horticulture will give me their aid and influence, in my efforts to make this department of the Planter what it should be, to meet the demands of our citizens. And as my essays will commence with the first number, I shall take up the subject of orcharding and apportion it under the following heads:

1st. The preparation of the land.

2d. The plan of staking, preparatory to planting, with two or three designs, illustrative of the mode of performing the work; also showing the relation that one tree maintains to another in quincunx planting.

3d. Transplanting.

4th. The selection of the trees.

5th. Mulching and its effects.

6th. Additional fertilizers for top dressing, annually.

7th. Training and trimming.

8th. The importance of keeping the rough bark and moss off from the trunk and limbs of orchard trees, and the kind of wash best calculated to keep the trees in a healthful condition and protect them from the scorching rays of the summer's sun, &c.

### 1st.—THE PREPARATION OF LAND FOR AN ORCHARD.

If the land is naturally poor, it must be made rich with the proper fertilising agents necessary to produce wood and fiber. And as it is not always convenient to plant orchards on lands that do not need to be enriched, we have thought a few remarks o [illegible] character on this subject would not be amiss. To every acre of land apply from fifty to one hundred two-horse loads of swamp muck, that has been well pulverised by the action of frost, or as much vegetable deposits from old fence or hedge-rows, where there has been a heavy accumulation of vegetable matter for a number of years. After the manure or mould has been regularly spread over the land, then plough it under deep with a two-horse barshear, and with another strong team follow in the same furrow with a subsoil plough or a broad footed coulter, (which if properly made is nearly as efficient.) Let the land lay in this condition until after the first hard freeze, and as soon as it is dry enough harrow the land thoroughly with a heavy spike-tooth harrow. Then plough cross-wise with the barshear and subsoiler, as before, being careful to break the hard pan or subsoil much deeper than it was broke at the first ploughing.

If there be time enough before the period designed for planting the trees, to allow the land to freeze again, it will be much better, as it will materially aid in pulverising the soil before the last harrowing, which should take place just before the trees are to be planted. If the land is naturally fertile there is no necessity for adding fertilising agents; but the thorough ploughing, and cross ploughing, and subsoiling, is emphatically one of the indispensables to successful and profitable orcharding.

### 2d. THE PLAN AND MODE OF STAKING PREPARATORY TO PLANTING THE TREES.

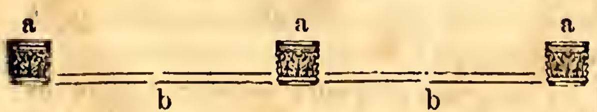
After the thorough preparation ef the land, the setting of the stakes is the next work in the routine of orcharding: and too much importance cannot be attached to the manner of performing this portion of the work; for if it is done indifferently. it will always be an eye-sore to the owner; and in the event that he should ever wish to dispose of his possessions, the imperfect planning of the fruit gardens will be very objectionable to the purchaser. Would it not be better in the end, for him to obtain the services of a professed hand, than to have the work done indifferently?

In the event that such services cannot be obtained, we will give a few practical hints for planning and laying out lands for orchards, such as we have used for years with the most eminent success. And it is not to be expected that any person will succeed in laying off an orchard correctly, unless they have the proper implements wherewith to perform the work. In the first place prepare at least one stake for each tree to be planted. They should be three feet long, perfectly straight, and one inch thick. In the second place, prepare a measure the length that the trees are to be planted asunder; make it out of a thin light plank, two inches broad, and square at each end. The only implements yet to be obtained, is a small wooden mallet, to drive down the stakes as they are set to their respective places, and a measureing tape some fifty feet long, such as is used in measuring lumber.

Before the direction for running the rows is settled upon, some importance should be attached to the relative position of surrounding objects, viz: Buildings, avenues, groves, parks, running streams, expansive sheets of water, or any other stationary object in the landscape that may have a controling influence on the tasteful arrangement of premeditated improvements.

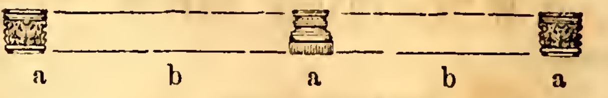
When it has been ascertained what direction the rows should run to harmonise with surrounding objects, then commence on the side where the first row is designed to be planted, and drive down a stake where the first tree is to stand; then drive down another at the extreme end of the row, the same distance away from the margin of the land prepared for the orchard. Proceed back to the first stake and place the end of the plank measure to the centre of the right hand side of the stake where the operator is looking in the direction of the stake at the far end of the intended row, at the same time place the other end of the plank measure in that direction and there drive down the second stake with its centre precisely half way upon or to the end of the measure as directed in placing the measure to the first stake. See fig. 1 for example: a a a represents the stakes driven down in a perpendicular position, and b represents the plank measure placed with the ends precisely to the side center of the stakes.

FIGURE 1.



If the stakes could be turned to a certain gauge, the they could be set against the ends of the measure as represented in Fig 2, a. a. a. stakes. b measure.

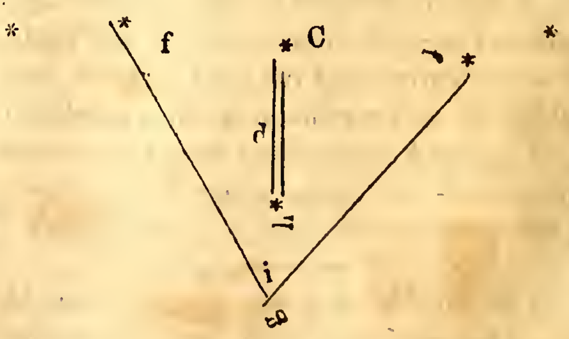
FIGURE 2.



In operating upon the plan represented in Fig. 2, no distance would be lost or gained if the stakes were precisely the same gauge. But for the reason that such stakes are not easily obtained, we will go on to describe the mode of staking as represented in Fig. 1. After the two first stakes have been set to their places, pass the measure forward in the direction of the stake at the extreme end of the row, until the end of the measure that was at the center of the first stake (as represented in Fig. 1.) comes precisely to the center of the second stake; drive down the third stake exactly ranging with those already set, and so proceed setting one stake after another until all the stakes have been set in a perfect line with each other and equi-distant.

Commence again at the middle stake in the row just finished, and place the measure to the stake as before directed in Fig. 1. and place the other end at right angles with the row pointing across the land prepared for the trees. In order to know when the measure is precisely at right angles with the row, it is necessary to obtain the precise point by the necessary tape, as represented in Fig. 3r C, center stake in first row; d measure: c. c. tape line with loops in the end thrown over first one and then the other of the stakes marked f. f, for the purpose of casting cross carved lines at g, forming the center at the cross of the curved lines, through which line i passes from stake c, forming a right angle from first row. h, represents first stake on

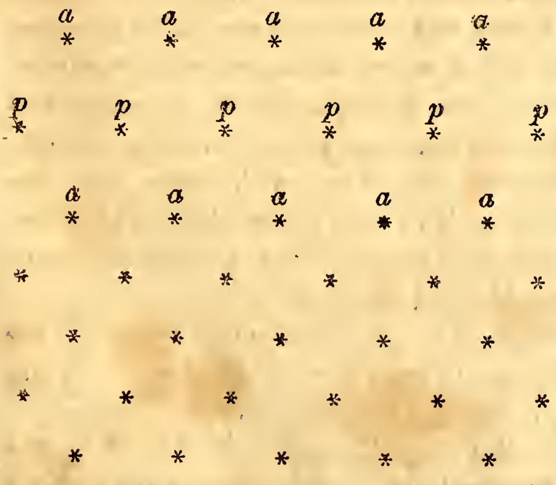
FIG. 3.



line i with end of measure laying against its center, as shown in Fig. 1. Proceed in the direction of g, across the land, setting one stake after another until the row is finished. Commence again at either side of center stake c, at f, and run second and third rows parallel with row or line i. It makes no difference now where the operator commences again, if he is governed strictly by correct measurement; however it is important that some instruction should be given in reference to the mode of sighting while setting the stakes. In this there has to be a certain system, as correct sighting is as important as correct measurement to make the work perfect. All sighting should be done on the right hand side of the row of stakes with the right eye, or vice versa on the left side with the left eye; as there is no certainty in sighting on the left of the stakes with the right eye, or on the right with the left. Practice has proven these facts to be true. If the sighting is done with the right eye, add row after row to the right hand side until the work on that side is finished.

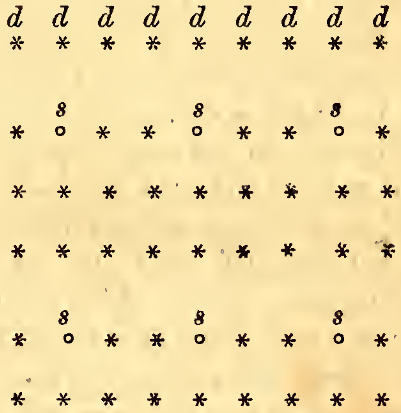
To plan an orchard in quincunx form, it is only necessary to make the measure twice the length that it should be to lay off an orchard at right angles, and after the land has been staked, as directed in the foregoing chapter, commence again and set a stake in the centre between every four stakes. See Fig 4, throwing every stake or tree into quincunx relation to each other, giving much more room by causing each tree to occupy a spherical relation to its neighbor.

FIG. 4.



The quincunx plan of orcharding is much used when apple and peach trees are to be planted in the same plot of land. We will suppose that the first set of stakes that were set in Fig. 4, were thirty feet apart, which are represented by A. for apple; and those set at the second staking marked P. for peach. There are two advantages secured by this mode of planting apple and peach trees together. The first is, that twice the number of trees can be put on an acre; and the second is, that about the time the apple trees come fully into bearing, the peach begins to die out, and then the apple trees have the whole of the land to themselves, which is a matter of importance to their longevity and future fruitfulness. We will give the plan of planting dwarf trees among standards, as the rule is not only ornamental, but profitable. See Fig 5, which represents an orchard

FIG. 5.



containing standard and dwarf trees. The standards, 30 feet apart, denoted by letter s, the dwarfs 10 feet, marked d. This mode of orcharding is well adapted to pear culture.—While the standards are tardy in coming into bearing, the dwarfs commence almost immediately, and although the trees are small and cannot bear a large quantity of fruit, yet, in the aggregate, an acre of such trees would produce a large amount of fruit, and that for several years before the standards will produce any fruit.

## Transplanting.

Now for digging the holes. And we do not intend to show that portion of the work done in primitive style. No, sir; we desire you to lay down that mattock you have there; there is death in it. It has caused the premature death of millions of trees; therefore, forsake those old fogy notions, because Dad done so, and lay it down. Now get a good spade and scoop shovel, and come with us to the place where the stakes have been set fo the trees, and we will show you how a digger ought to dig holes. Have you got that cord two and a half feet long, with a sharp peg tied in one end and a loop tied in the other? If you have, we will throw the loop over the stake and strike a circle around it, which will be five feet in diameter. Now take the spade and cut the hole to the scribe all around and throw the top soil in one direction and the subsoil or hard pan to the opposite side. Dig the hole from twenty inches to two feet deep. If the top soil is rich in vegetable matter, shovel it into the bottom of the hole again, forming a mound in the center of the hole so high that the tree when set on the center of it, will be about as deep in the ground as when it stood in the nursery; then spread out the roots in every direction, so as to brace the tree when it has grown large — Press the pulverized soil in the interstices among the roots with care, so as to leave no cavities. If the soil is dry, it is better after the roots have been covered to pour in a quantity of water on and about the roots, and then shovel in the rich mould sufficient to fill the hole, and level off around the tree and pack slightly with the foot. After planting, if the tree be large, drive in a strong stake about a foot from the root of the tree in a leaning position, so that the stake will cross the stem of the tree some two or three feet from the ground, and fasten the tree to it by a band of damp straw, passing it several times between and around the tree and stake.

As much space as ought to be appropriated to Orcharding, in one No. of the "Planter," is already consumed, and we must defer further remarks till the next No., when we will continue our series of directions, as indicated in our Programme given above.

## Number of Trees on an Acre, when Planted.

| | | | | | |
|---|---|---|---|---|---|
| 40 | FEET | APART | EACH | WAY, | ...............25 |
| 35 | " | " | " | " | ...............36 |
| 30 | " | " | " | " | ...............48 |
| 25 | " | " | " | " | ...............69 |
| 20 | " | " | " | " | ...............109 |
| 18 | " | " | " | " | ...............135 |
| 15 | " | " | " | " | ...............194 |
| 12 | " | " | " | " | ...............302 |
| 10 | " | " | " | " | ...............436 |
| 8 | " | " | " | " | ...............681 |
| 6 | " | " | " | " | .............1210 |
| 5 | " | " | " | " | .............1742 |
| 4 | " | " | " | " | .............2722 |
| 3 | " | " | " | " | .............4840 |

## Gardening for February.

The wise man hath said, "to every thing there is a season, and a time to every purpose under heaven"; and among the rest, *a time to plant*. True; but we must acknowledge that the season is so very different from the parallel time of past years, that we do not know how to anticipate what should be the mode of procedure in garden economy for the present month, to insure success in raising early vegetables. But we would advise our readers to commence active operations in the preparation of the soil, if this work has not been done by trenching or spading during the months of October and November.—The soil that was on top last year, should be inverted, by spading; at the same time throw up the under stratum from beneath to the depth of a foot, so that the atmosphere may exert an ameliorating influence upon it, decomposing those dormant elements of fertility so necessary to secure a luxuriant growth of vegetables. After the lands have been subjected to the action of the frost for a week or two, give them a heavy dressing from the compost heap, and at the same time apply salt broadcast, at the rate of two bushels to the acre, and plough the whole under to the depth of four or five inches. In this condition let the beds lie until the time to sow seeds or transplant.

The beds designed for onions should be well manured with the scrapings from the barn house. Small onions and cloves may be set out and onion seeds sown as soon as the ground is ready to receive them.

Irish Potatoes may be planted now in deep furrows, two feet apart. Drop the potatoes or pieces, one foot in the row, fill the furrow half full of well rotted manure from the horse stable, then throw a furrow upon the manure and potatoes with a barshear plough, then cover the whole with leaves from the forest, at least six inches thick, and throw brush enough over them to keep the wind from blowing them away.

Now is the time to make or repair the frames and sash of the hot beds for starting early peas, cabbages, radishes, lettuce etc.—Mr. Peabody, Horticultural Editor of the American Cotton Planter, recommends a very cheap hot bed made after the following plan, which no doubt is fully sufficient for southern use: Excavate a piece of ground, as large as the frame is to be, twelve inches deep: in this put six inches of good cotton seed, fill up with garden soil and put on the frame. The frame may be made of common rough plank, facing and sloping south, with a common window sash to cover it. In this plant the seeds; the heat of the cotton will force the plants into a quick growth. In mild weather, take off the sash so that the plants may have fresh air. Where cotton seed cannot be had, stable manure will answer. Have convenient some old matting, straw, or hay, to place over the sash in very cold weather.

## The Strawberry Bed.

The land for Strawberry culture should be spaded deep, and well supplied with vegetable matter, and thoroughly incorporated with the soil. We have used the decayed portion of old logs from the woods, as an annual dressing, with fine success. Prepare the beds for the plants by laying off the rows about two and a half feet apart; raise the rows, about two inches, which leaves a concave between the rows some fifteen inches wide.—Put the plants twelve inches apart in the rows. The first season cultivate them nicely without any mulching, and pinch off the runners with the thumb and forefinger as fast as they make their appearance. The beds that were set out last spring, should be well mulched immediately with pine straw, spent tan, or cut straw, if it has not been done previously. October or November is the proper time for this work, because it prevents the plants from freezing out during Winter.

## The Grapery.

It is of the utmost importance that all grape vines (except the Scuppernong) should be pruned annually, in accordance with the foreshortening or cutting back principle, in order that the vine in after years may assume more of the stocky character of a tree than a vine. In order to effect this thing, the vines that were planted last season should have been cut back during the months of October or November, or the first half of January, to two buds. We would still prune if it can be done immediately, as there will not be much danger of the vines bleeding, if spring has not actually set in. Those planted two years should be cut back to four buds. Those planted three years should be cut back to six buds, and when they commence growing, pinch back all but three branches. During the growing season train the top or center vine perpendicularly, and the other two horizontally. At the close of the fourth year, cut back the three branches to two buds each; when they start to grow in the spring, pinch back or rub off the lowest bud on each prong of the vine; train them as directed for third year. The vines, if they have been planted in a deep rich mould, will be large enough to train to a trellis, which should be formed by planting hewn or sawed posts of durable timber eight feet apart and eight feet high, with No. 2 wire placed horizontally upon the face of the posts ten inches apart. The wire may be fastened to the posts by small staples, or it may be wrapped round the projecting heads of twelve penny nails that have been previously driven into the posts for the purpose. The wire should be drawn as tight as possible. Upon these wires, train the three branches of the vine perpendicularly, fasten the central branch to the center of the trellis, train the other two horizontally to within twenty inches of the posts on either side of the main stem of the vine, from thence train them up across the wires parallel with the posts, so dividing the distance on the face of the trellis that each prong of the vine will supply new wood enough to fill the whole face of the trellis.—The new wood should be trimmed back to one or two buds on the main perpendicular prongs of the vine annually, which should remain stationary for the purpose of forcing out new latteral branches on the wires, to produce the annual crop grapes, which will be very abundant and of superior quality. Twenty vines, treated in accordance with these instructions, and planted in a deep rich mould, will be large enough to train to a trellis, which should be formed by planting hewn or sawed posts, of any timber that will last well under the ground.

## The Garden.

Most persons have a place which they dignify by the name of garden, but at this season of the year they more resemble a cane brake, or wilderness. After the spring vegetables have matured, the ground is too often allowed to grow up to weeds so thick as to render it difficult to get through them. True economy, to say nothing of good looks, would dictate that all weeds in the garden be kept down and not allowed to go to seed and again be multiplied fifty or a hundred fold the next year, causing an immense amount of labor in future cultivation. Where weeds are allowed to take possession of the ground they should be cut up at once and removed before they scatter their seeds for a future crop. No part of the farm affords a greater return for the labor bestowed than the garden, and still no part of the farm is more neglected. No better time will present itself for clearing off the garden than the present. If deferred till spring, a thousand other things of more pressing importance then require to be done. It is an excellent plan when the weeds are cleared off to haul out the manure intended for the garden, spread it and turn it under with a good plow, preparatory for a second plowing in the spring. Late fall plowing exposes thousands of insects to the effects of the frost, which otherwise would prove very destructive to the spring crops.

## Fruit Growing,

This branch of industry is becoming more and more important to the farmers of the country, and more taste is becoming evident among the producers and consumers of this great annual luxury. Not one fourth enough, however, is yet produced to meet the actual demands of the market, while the numerous railroads are opening new avenues, and producing a greatly increased demand for the fine fruits of all kinds.

Let the farmers have an eye to this, and ere the sunny Spring swells the bursting buds, see that they have a few more trees of choice varieties planted and ready to be coming on as the old ones fail. Let none but the very best and most approved varieties be planted—an indifferent tree takes up just as much room as one of the best, be it remembered—and an eye should be had to the adaptation of particular varieties to particular localities.

Don't plant seedling stocks under any circumstances, unless it be experiment, and your neighbor nursery man can better afford the time for that than you can; but go to him and procure some of the very best varieties of the various fruits he cultivates. Hundreds of people stick to the old Horse Apple and the Sweet, as the very best apples ever grown and utterly repudiate the idea of there being anything better in the whole apple kingdom. The same class continues to raise their peach trees from the seed of even the common varieties grown in this country before the war, and vow that there is nothing richer in Persia or America; and if the stunted pear tree, planted by their grandame, happens to "hit" and yield a basket of choke pears, they are set aside until the minister or some other company comes.

Now, if this old fogy class could only get a taste of the improved varieties, they would lay the axe to most of the trees they prize so highly. We would like to see the lover of sour peaches accidentally find in his basket an Early York, a Heath, or a Tippecanoe; or the advocate of the old choke pears fall in with a Bartlett, a Seckle or a Flemish Beauty. What a surprise! What a sucking of the nectared juice! Procure some of the best varieties of fruits at once and enjoy their luxuries in season, even if you have no idea of making it a source of profit from marketing.

## Soils Best Suited for the Various Garden Vegetables.

A good many readers who are desirous of forming a vegetable garden, are yet at a loss how to prepare their soil to suit the various kinds of vegetables they may wish to cultivate. As some slight guide, yet reliable so far as it goes, we offer the following:.

*Asparagus.*—Ground should be light, yet rich; a sandy loam well mixed with rotten dung or seaweed, is recommended. A good quantity of dung, trenched twelve or fifteen inches below the surface, is right.

*Beans.*—The bean is propagated to the best advantage in a stiff, moist loam, with a considerable proportion of clay, although it will grow well on any properly prepared garden soil. Mr. Louden gives the following directions for its culture:

For early crops, one pint of seed will be requisite for every eighty feet of row; for main crops two quarts for every 240 feet of row, and for late crops nearly the same as the early. Plant in rows two and a half feet apart, for the smaller and three feet for larger; the small, if beans, two inches deep and three inches distant in a row; the larger three inches deep and four inches distant in the row.

*Beet.*—For a bed four and a half by twelve feet, one ounce of seed is requisite. The soil in which it naturally delights is a deep, rich sandy, dry and light, rather than moist.—Transplanting will not answer where the object is a large clean root.

*Cabbage.*—Every variety of cabbage grows best in a strong, rich, substantial soil, inclining rather to clay than sand; but it will grow in any soil if it be well worked, and abundantly manured wlth well rotted dung.

*Carrot.*—The carrot requires a light, mellow soil, mixed with sand, and should be dug or trenched one or two spades deep, breaking well the lumpy parts, so as to form a porus bed and even surface.

*Celery.*—Celery delights in a soil rather moist, rich in vegetable mould, but not rank from new rotted dung.

*Cucumber.*—In our climate cucumbers will grow in any soil, though not with the same degree of vigor, provided they be supplied with a sufficiency of heat, light, water, and air. It is an object with many market gardeners and others, to produce cucumbers at an early period, and for this purpose artificial heat is necessary. For early forcing, one third of rich top spit earth from an upland pasture, one-half of vegetablemould, and one-sixth of well decomposed horse dung, with a small quantity of sand.

*Lettuce.*—All the sorts grow freely on any rich, mellow soil, where the sub-soil is dry. For the most part raise this vegetable as a principal crop, on beds set apart for it, and keep the varieties separate; but to multiply the supplies, throughout the summer, portions may be sown thinly intermixed with onions, carrots, and spinage, which will come off before the lettuces are fully grown.

*Melons.*—The melon succeeds in any strong, unexhausted loam, rich in vegetable matter, with a mixture of sand, but not too light.

*Onion.*—The onion, to attain good size, requires rich, mellow ground, on a dry soil, If the soil be poor and exhausted, recruit it with a compost of fresh loam and well consumed dung, avoiding to use stable dung in a rank, unreduced state. Turn in the manure to a moderate depth; and in digging the ground let it be broken fine.

*Parsnip.*—The soil should be light, deep, and free from stones. It should be dug or trenched before sowing, one good spade deep at least, being careful to pulverize the soil thoroughly, that the roots may have no obstruction to prevent their running down long and straight. If the soil be proper for them, it is said that they will not require much manure; and what is used should be perfectly decomposed, or, if recent, be deposited at the trench. They do not impoverish the soil like onions.

*Peas.*—The soil should be moderately rich, and the deeper and stronger for the lofty growers. Peas are not assisted, but hurt by reduced dung recently turned in. A fresh sandy loam, or road-stuff, and a little decomposed vergetable matter is the best manure. The soil for the early crops should be very dry, and rendered so, where the ground is moist, by mixing sand with the earth of the drills.

*Radish.*—The soil should be light and mellow, and well broken by digging. A scattering of the smaller growing sorts may be sown among other crops, such as spinage, lettuce and onions. It may also be drilled between wide rows of beans, or on ground intended to be sown with a late spring crop.

*Tomato.*—To have an early crop, sow the seeds in a dry and warm soil, and sheltered situation, in October, and cover during the winter. For summer and fall use, sow again in May. and water freely. The distance between the plants should not be more than two feet.

*Turnip.*—Sand or gravel, with a mixture of loam, produce the sweetest and best flavored roots. It should be made fine and not too rich, lest the turnips be rank and illtasted.

We have given these brief directions, partly to call attention to the fact that the season is at hand when ground should be prepared, gardens set in order, seed procured and everything made ready for a vigorous gardening campaign—a campaign not so laborious or expensive as a military campaign, nor so detrimental and evil in its consequence, for the fruits of it are health, the rich products of the earth, satisfaction in enjoying the fruits of our labors and sweet contentment.—*Real Estate Register.*

◆

☞ Remember! in time, next Summer, that Arthur's self sealing Cans preserve fruits as fresh and sweet as when plucked.—We had a Christmas pie made of Blackberries as plump and juicy as any we had last summer; which so regaled us that we shall try to get more put up for the Christmas to come. Fresh fruits may be had all the year with a little trouble, Remember! ——

◆

Sugar Growers' Convention.—A Convention of Northwestern Sugar-growers assembled at Springfield, Ill., on the 7th inst. The meetings were held at the State House and were largely attended. Judge Caton presided. Letters were received from cultivators of the Chinese cane in Kentucky, Ohio, Indiana, and other States; all expressing satisfaction at the results of culture. One cultivator gives, as the result of his experiments, accounts of a yield of 1,221 pounds of brown sugar and 74 gallons of molasses from a single acre. Another states that the poorest ground produced the richest cane; and *vice versa.* A third dwells upon the value of the seed as an article of food; the average yield being 25 bushels per acre. It is said the seed produces a flour equal to the best Pennsylvania buckwheat, both in quality and quantity. The Convention debated the propriety of organizing a "Northern Sugar cane Association," but finally decided it inexpedient to form a body distinct from the General State Agricultural Society. A Mechanical committee, appointed to report upon the best method of pressing the juice of the cane, reported in favor of a machine consisting of three smooth cast iron rollers, placed vertically or horizontally; but declined to decide upon the relative virtues of steam or horse power. The Convention adjourned, after empowering the President to appoint a Committee of Nine to collect facts and statistics in relation to the growth of sugar. The meeting developed a number of interesting facts, and has given a powerful impetus to this new branch of enterprise.

Golden Rules For Gardeners.—Never work with bad tools. The difference between the work done in a month would buy a set of new ones.

Have a place for every tool, and never leave one out of its place; or to go further, a "place for everything and everything in its place."

Never waste animal or vegetable refuse. The very soap suds from the laundry are rich manure.

Never grow a bad variety of anything, if you can help it. It takes the same room, and wants the same attention as a good one.

# 100.000

## CHOICE FRUIT TREES FOR SALE,

## BY WESTBROOK & CO.,

AT THE

## West Green Nurseries and Gardens,

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

**30 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale, raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

◆

THE SPIRIT OF THE AGE, a large weekly family Newspaper, is published in Raleigh, by A. M. Gorman; price $1 50 for single copies—to clubs of five and upwards, $1 each.

Col Wm. Aw. Lenoir

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., FEBRUARY, 1858. NO. 2.

**THE NORTH CAROLINA PLANTER,**

Is published monthly, in Raleigh, N. C., at ONE DOLLAR A YEAR, ☞ *payable invariably in advance.* ☜ From this rule there will be no deviation.

No copy will be sent unless the cash accompanies the order; and it will be promptly discontinued at the close of the subscription year, unless the money is forwarded for renewal.

Gentlemen of ability and experience will conduct the PLANTER. All communications to be addressed to A. M. GORMAN, Publisher.
Raleigh, N. C.

*For the N. C. Planter.*

## On Broomsedge.

MR. PLANTER: I have been very much interested and instructed, in perusing an Essay, recently read before the Indian Land (S. C.) Agricultural Society, on the subject of Broomsedge, (a familiar subject to North Carolina farmers,) in which the following questions are discussed:

1st. "On the best mode of eradicating it."

2d. "Is Broomsedge a fertilizer."

The writer disposes of the first proposition in a few words. He says, as a perennial plant (and they are generally the most difficult to eradicate,) it is as easily eradicated as any one of that class. For its successful eradication—the improvement of the land—to facilitate the cultivation—to promote the growth of the crop which is immediately to succeed it, the writer says the best plan is to plow it under early in the fall, whilst it is in a green state—completely turning it over with a good turning plough. In that condition it soon rots and becomes incorporated with the soil. But if not completely reversed or turned over, and its roots exposed to the frost and sun, it will survive the winter and be very much in the way of cultivation, and will retard the growth of the crop, or from the "open" condition of the soil, the crop will be late in "starting off" in the spring.

These observations fully correspond with my experience, and doubtless that of many others who have taken similar steps for eradicating Broomsedge. It must be thoroughly ploughed under and reversed, leaving the roots exposed, or it will shoot up again in the spring. But the most important point discussed, is

"*Is Broomsedge a fertilizer ?*"—The writer of this Essay says, in a strict sense it cannot be considered as such. I quote his own language. He says:

"It will not of itself, render an exhausted soil fruitful. It will not restore to the soil all the elements of plants of which it has been robbed; but that it is exhausted nature's first attempt, or effort at restoration, and will eventually produce fertility of soil, I think there is no doubt. With many persons, I find that poverty and sterility of soil seem to be associated with the very idea of broomsedge; so inseparably connected in their minds, do they seem to be, that they believe it to be the cause and not the effect—as it often is—of such sterility, and would say eradicate it, exterminate it; an idea which the first proposition suggests, but science comes to its rescue—nature herself cries out let it alone. It will grow and flourish where no other plant will vegetate; it will protect your carcass of a field from the scorching rays of the summer's sun; it will preserve it from further leaching, and washing by the rains. Science teaches us that by its deep reaching roots, it draws and brings up salts and minerals from the subsoil; by its stems and leaves it imbibes elements from the atmosphere, which, when it is allowed to die and rot where it has grown, will be converted into food for a higher order of plants, such as briars, weeds, the pine, &c. Thus improvement progresses, and eventually restoration of soil will be established, and fertility produced; not directly to be seen, but indirectly, by this, to many, very contemptible plant, broomsedge.

I feel willing to rest the truth of the affirmative of this question, on the following proposition, viz: All plants are more or less improvers, and cannot be exhausters of the soil if they are allowed to die and rot where they have grown. No one it seems to me upon reflection—prejudice aside—will attempt to controvert or dispute the truth of this proposition. Even man, who feeds upon the richest and most extravagant productions of the earth, would have removed nothing from the soil, if when he died, his body were left upon the surface of the earth, and there allowed to rot. Says Liebig, "the enormous quantity of food which man consumes, during the sixty years of his life, and every constituent of it, that was derived from our fields, may be obtained and restored to them."

I have said that I find that many persons entertain the belief, or opinion, that broomsedge exhausts lands. One man, a very good practical farmer too—at least that sort of a one, who upon good land, with good seasons, would make good crops—said to me that he would rather have a crop of wheat to grow on his land, as a crop of broomsedge.

"Oh!" said I, "I think you must be mistaken." "No I *ain't*" said he. "Any how they say so;" you ask any of our old farmers, and they will tell you that broomstraw impoverishes land worse than *a'most* anything else."

Remember, this man was an anti-book farmer, one of your real practical fellows.—Now I make the assertion, and dare any one to prove to the contrary—by experience, science or anything else—that one crop of wheat will exhaust land more than five—yes I might safely say, ten crops of broomsedge—allowing both crops to be removed from the land after they are matured.

Broomsedge produces so little seed—in weight—that it takes from the soil very little of these precious ingredients—the phosphates—of which wheat and all plants that produce seed suitable for the food of man and beast, require so large an amount of; and are so indispensable to the full development of their kernel, and which abound in all fertile soils.

I do not design submitting any remarks of my own on the subjects discussed above; but wish simply to get you to lay the matter before your readers, hoping it may elicit the attention of North Carolina Farmers, who, as a general thing, have as much experience in the growth of Broomsedge as any State in the Union. I know we have generally regarded Broomsedge old fields as next to worthless, and with many the idea that it was in any respect a fertilizer, was never once dreamed of. But from the above extracts, we may well inquire if it is not really of more service than we have generally supposed?

Allow me, Mr. Publisher, to congratulate you on the appearance of the first No. of the N. C. Planter. It contains a large amount of practical and valuable information to the Planters of our State, and I hope you will be liberally supported. I feel very poorly able to contribute to an Agricultural journal, but if all will do as I have—do the best they can—you will be able to make your paper one of the best in the country. Let every farmer write something.

JOHNSTON.

*For the North Carolina Planter.*

## Exhausters of the Soil.

Messrs. Editors:—The generally received opinion is, that Oats is a greater exhauster of the soil than Wheat. This is a very great mistake. Leibeg, whose authority no intelligent farmer will pretend to call in question, says:

> "A greater quanti y of the phosphates is removed in the seed and straw of one crop of wheat, than would be removed in three or four crops of barley or oats. The weight of the ashes of a crop of the seed of wheat is to tha of oats, as 34 : 466; the phosphates contained in them as 26 : 10."

I know there are persons who will say—"I don't believe a word of it; for I have always heard that oats are great exhausters of land; certainly much more so than wheat." One of the reasons assigned for this opinion, is the rapid growth of oats—their maturing in much shorter time than wheat. By the same sort of logic or arithmetic I suppose these skeptics can make it appear, that if one man eats a loaf of bread in one hour, he eats less than another man who eats a smaller loaf in half an hour.

Science has exposed and removed many such fallacies that have been handed down to us, founded only in ignorance and a blind credulity—a sort of superstitious belief in the simple "*say so*" of those who have gone before us. And the only way to remove this sort of credulity and superstition, and to set us to thinking for ourselves, or to acquire the power to resist their effects, is to obtain a knowledge of true scientific principles, and this knowledge cannot be obtained without reading and study. Yet we have planters among us—intelligent men too—who ridicule the very idea of *book farming* as some are pleased to call it. Yes, even deprecate reading anything on the subject of agriculture. Some are disposed to ridicule agricultural societies, and every thing, and every body connected with them. I hope the days of all such old fogyism will soon be numbered in North Carolina.

SUPER-PHOSPHATE.

Messrs. Editors: I find the following article in an old No. of the N. C. Farmer, and would be glad to see it copied into the Planter. I think its perusal at the present time, will be appreciated by the Planters of our State:

## Agricultural Improvement in Edgecombe county.

We lay before our readers an extract from a letter writen by Jesse H. Powell, Esq., of Edgecombe, which we are sure will be read with a deep interest by every farmer who may see it. We know the writer well; he is a gentleman of fine talents, and has acquired a great deal of useful information upon almost every subject. How much longer will our farmers continue to be ignorant of their daily pursuit in life, when they have such testimony as is contained in this extract to prove what are the good results of reading Agricultural papers, and becoming members of Agricultural Societies. The bright example set by the farmers of Edgecombe is worthy of being followed by every county in our State, and we do not hesitate to say that the same energy used, and the same knowledge of farming put into practice in other counties, will be crowned with the same success. We hope that Mr. Powell will become a correspondent to this Journal, and continue to diffuse the light among the farmers of the State which he has begun in his letter:

*Battleboro'*, *Edgecombe co.*,
March 12, 1852.

"Having a little leisure, and believing that you and others in the upper counties are too much disposed to attribute the improvement in farming in this county, now in its infancy, to Marl, and in order to show you that kind Nature has put in your reach the materials of improvement in abundance, I am induced to make some remarks. A portion of this county (Town Creek) which has, I believe, the best practical farmers in the State, and who realize the largest profits, is almost destitute of Marl—but one farmer in that region having used it at all, and he only during the past year. A great deal of this land, formerly quite poor, is now producing 1200 lbs. seed cotton to the acre, and one farmer has averaged over a bale (400 lbs) to the acre—his crop seventy odd bags. Swamp mud, fence scrapings, ditch bank, ashes, stable manure, and their suplus cotton seed, are the materials used.

"Having committed some errors and improved by experience, though only a medium farmer, permit me to submit my present plans of operation in improvement, not doubting that you carry it much further. The land intended to be manured is first staked off 70 yards apart, which puts it in acre lots. In the centre of this I begin my heap; if the land is very poor, and the larger portion is of this kind, I first put down 20 loads of Muck in a circular form of 15 or 18 feet in diameter, which is made level with the hoe, on which is put (measured) 8 or 10 bushels of cotton seed, and spread regularly over. I now put on 17 or 18 loads more of muck (diminishing the number of loads as I raise the heap) which is followed by 12 or 15 bushels of stable manure—continuing in this way until the heap is finished, generally having two layers of seed and two of manure—the whole to be capped off with 10 or 12 bushels unleached ashes. The whole pile when finished, is not more than 30 or 36 inches high. The advantage in having the pile so large for the height is in order to drive up the mules on the heap and pour out, thereby saving much labor. I prefer putting in several kinds of manure in the heap—the one containing fertilizing properties that the other does not. The size of heaps is made to contain just the number of loads intended for an acre. Some of the heaps are made entirely of ditch bank and ashes, the proportion about 10 or 12 bushel ashes to 20 loads ditch bank.

"My carts are made to hold, when heaped, about 6 bushels. This prevents overloading and renders the application of land more regular. If I wish to use manure on corn, the shovels full that are required to fill the cart are carefully counted, and the load dropped accordingly—a shovel full to the hill, on the grain of corn. This will work out exactly, neither too much nor too little.

"The improvement now going on in this county, is greater than ever seen before. The increased quantity of manure is supposed to be double that of last year. Thorough draining is certain to follow this system—old ditches must be cut deeper in order to furnish material for the compost heaps, and new ones cut from the same cause.

"I raised last year, 3000 loads of manure, this season over 5000, and am now convinced, by beginning my operations as soon as the present crop is laid by, I can with more ease put up 10,000. I have reserved some cotton seed to begin with, and shall reserve all the manure raised from the 1st April until August. The rafts that have formed in my low grounds, together with dead trees, will be converted into ashes. This last article I am careful to use immediately after the first is out. Manure put up so long before it is used and exposed to the weather will require a small portion of charcoal (powdered) or plaster applied to prevent the volatile property from escaping. I am at this time breaking my compost heaps and hauling on the land. A man will load and drive and carry out 75 loads a day.

"I believe we, living in the cotton region, should set aside an improving force, to be constantly devoted to that branch of business. Under our present system there is too much work crowded in the first three months of the year; consequenty, it is not done (ploughing particularly) as well as it should be.

"Other changes besides improvement in the lands have taken place: emigration has ceased to flow from our county; not a single instance can I now remember of any persons having moved from here in two years; a degree of health which was never known before; and a perceptible improvement in the *morals* of the community. What has caused this?

"I see with pleasure your county is roused upon the subject of improvement. You have but to go on for a year or two and there will be no stopping it. Men do not recede from their interest. We are but a step or two a head of you. In less than ten years (mark the prediction!) your best farmers will be raising their bag of cotton to the acre; for you have some advantage over us—a city in the centre of your county, furnishing a large quantity of manure—your population greatly increased, together with every evidence of wealth, prosperity and happiness.

Very respectfully yours,
JESSE H. POWELL."

The following memorandum accompanies the letter. It shows the progress of Improvement on Mr Bullock's farm during three years. The last year, it will be seen the product nearly doubless that of the first! Will any farmer still be so stupid as to say "there is no advantage to be gained by reading"—"no good in book farming"—that "agricultural societies are useless institutions—humbugs!" Why these very means have led Mr. Bullock to make enough in a single crop for a small capital to begin life with. Farmers arouse! and read! and think! and work! A brighter day is dawning!

MEMORANDUM.

"18 to 20 hands, 3 men, the balance women and children.

| 1849. | 1850. | 1851. |
|---|---|---|
| 50 bales. | 61 bales. | 98 bales. |

D. W. BULLOCK."

*From the Southern Cultivator.*

## Artificial and Stable Manure.

I have for years employed the various kinds of concentrated manures, as well as different kinds of farm yard dung, and yet with every inclination to prefer the former, I feel compelled in the majority of cases to prefer good barn-yard muck to anything else.

Though professing to be but a plain, practical tiller of the soil, I class myself with those who like to know some kind of reason for their various operations. I have read carefully the writings of agricultural chemists on the action of manures, and on the analysis of plants, and their reasonings have always seemed to convince me that all that was necessary to insure as perfect a vegetabe growth as possible, was to supply the soil with the different ingredients that entered into the composition of the plants grown. Experience has confirmed this to a great extent. But the same effects in most instances are produced by stable manure. I have seen instances where comparative experiments have been made, that concentrated manures of some kinds have produced superior results; but this is anything but the rule.

In short, the conclusion I arrive at is, that while science teaches us to prefer concentrated manures, we in practice have to give the preference to the old-fashioned manures. How is this to be reconciled? I would suggest whether the mechanical action and thermal effects of vegetable manures, are not overlooked by our chemists? It seems to me that no matter how well adapted certain elements may be to vegetable growth, the plant is unable to avail itself of the opportunity without a due proportion of heat.—All dark soils are much warmer than light ones; and it may be that the power of stable manure to give a dark color to soils, and thus render to it a greater power of supplying greater warmth to the plant, may be one reason for its superiority in practice. Light-colored soils are usually poor, and dark ones fertile; and this is probably owing to the greater warmth of the latter. If this be recognized as correct, much of the opposing experience of different observers will be reconciled; for concentrated manures, guano, for instance, while it might prove warm and dark colored, would stand no chance at all where a poor light colored soil was chosen for the experiment.

---

*From the Charleston Mercury.*

## A Wonderful Fertilizer.

Monsieur Lucas, a chemist and a savant, has found, after many years of study and research, an extraordinary fertilizer. The elements of this composition are stated to be very ch[illegible]p, and still an admirable substitute for stable manure and guanos. The experiments made have established this important fact, that while Wheat generally contains about eleven per cent. of gluten, that produced by the use of this new substance contains as much as twenty-seven, and even thirty per cent., and that fifty francs of this substance will go as far as three hundred and twenty francs of guano.

Every day we are more and more convinced of the greater benefit, Chemistry has conferred on man than the mariner's compass; because, while this latter has enabled us, at great risks and expense, to procure substances at great distances, over seas in foreign parts, the former teaches us to find at home what we never supposed possible to obtain, and never dreamed in our philosophy to exist, or to be able to enjoy at so cheap a rate. Beet-Sugar is one of the many material blessings that France owes to Chemistry.

Guano speculators, look out! Othello's occupation is gone.

J. Togno.

## Sugar from Watermellons.

We clip from the "American Agriculturist," the following: "A friend has shown us a private letter (dated Sept. 4,) from a brother in San Francisco, California, from which we make the following extract: I intend (says the letter writer) presenting to Mechanics' Institute of San Francisco, some specimens of Syrup and Sugar made from the Watermellon. I consider the mellon as the best source of syrup that has ever been tried—far more convenient than the best of cane. All that is necessary is to press out the juice and boil; then strain it thro' flannel, and evaporate to a proper consistency. One gallon of juice from the *pulp* yields one pint of syrup, or three quarters of a pound of sugar.

## How to Increase Manure.

If you have not hitherto done so, permit us now to prevail on you to take this advice:—Have as many loads of rough materials hauled and spread over your cow yard as will make twelve inches in depth. In spreading, so fashion the materials as to be basin shaped, the lowest point being in the center, to prevent the escape of the urine. While the rough materials are being placed in and spread on the yard, dust each layer so spread with plaster, or with pulverized charcoal, and when completed, dust the surface with either of the substances named; then roll the yard to consolidate its contents—the heavier the roller the better. Occasionally throughout the yarding season spread plaster over the yard, and from time to time add rough materials.—*American Farmer.*

## Horses' Coats.

Lately going to the country to spend a few weeks with a friend of mine, I drove a very handsome horse, and a good 'un—but was always annoyed about his coat, as it was more like a lot of bristles than a horse's smooth skin, and all the grooming he could get "would'nt do him no good." My friend, who is a great horse breeder and fancier, made me try giving him a few carrots every day out of my hand, saying that he would have a good smooth coat in three weeks—and he was right, for in that time my horse had a beautiful, sleek, glossy coat, and all from eating a few carrots daily. He tells me it is infallible.—*Porter's Spirit.*

## Application of Manure.

The principle to which we have reference is this, that the more intimately any manure is mixed with the soil, the greater will be its fertilizing effect. This is so well established and important, practically, as to make it desirable that every means should be adopted, especially with costly commercial manures, which will bring manures into more perfect contact with the soil. Foremost amongst means for this end stands, of course, the judicious use of manure in a liquid state; next to this is the method of compost heaps. The efficacy of such manures as guano, &c., might be increased, if for some time before they were employed they were mixed with a considerable portion of muck, loam, or other good soil, and moistened, or in other words made into a compost. When this cannot be done on account of want of time or help, the practice of a large farm in England might be advantageously imitated. This practice, not yet laid before the American farmers, so far as we have noticed, consists in mixing guano intimately, with an equal bulk of salt, in the hopper or otherwise, at the time of sowing it, after (or with) the seed-drill. The employer of this method thinks it helps the act of distribution greatly, especially when the guano is previously pounded fine, and the rapid assumption of moisture by the salt must favor its solution and dissemination in the soil. It is a practice well deserving of trial or adoption.—*Country Gentleman.*

◆

### Whence comes the Cut Worm?—A Question to be Answered.

*To the Editor of the American Agriculturist:*

Whence comes the cut worm, which is so destructive to corn and potatoes, and especially to the tobacco crop? The question was suggested by the following fact: A piece of ground plowed early, with the intention of a second plowing, received instead a thorough harrowing, which, owing to the ground being very wet at the time, packed the soil so tightly as to make it difficult to hill it, and the harrowing was discontinued. The remainder of the piece, having similar soil and treatment, otherwise, was plowed in the course of a day or two, which left it mellow and light.

Now what had this to do with the worms which, on the plowed piece, cut down nearly every plant, at least once; and on most of the piece, a half-a-dozen times; while on the portion harrowed, and thereby packed, very few plants required resetting.

SUBSCRIBER.

Cromwell, Conn., Dec. 14th, 1857.

◆

### A New Variety of Wheat.

A gentleman from Alabama received from the Patent Office some spring wheat from the farm of Abraham, at the foot of Mt. Carmel, in the Holy Land, which he sowed during the past Spring. It came to maturity in seven weeks, producing a large full head, with a berry in every respect equal to the original. This wheat is reputed to ripen in Syria in sixty days from sowing. It will thus be seen that our climate hastened its period of maturity eleven days.

◆

### Clover Fields.

Under the improper treatment which clover often receives, it is liable under the influence of the frequent freezing and thawing to which it is exposed in our Western climate, to be materially injured and frequently entirely killed the first winter after it is sown. This need not be the case, if proper care is taken to allow it to protect itself.—The primary object in sowing clover, should be for the improvement of the soil. To secure this, it should be cut but once in a season, unless it be for the purpose of saving the seed from the second or fall cutting. If it is not designed to cut the first crop for hay, but reserve it for pasturage during summer, the stock should always be turned off, and never allowed to graze it after September. All the subsequent growth should be left for the protection of the plants during winter. Farmers will do well to bear this in mind, and not allow their stock to enter upon their clover fields again, until the new growth of the next spring is in blossom. If the crowns of the plants are eaten close, and the ground left bare, and trampled under the feet of stock, during winter, more than half of the plants will be drawn up by the frost, and completely killed before spring. A little observation will convince any one of this fact during the present winter.—*Valley Farmer.*

*From the Genesee Farmer.*

## Agricultural Papers, and the Duty of Farmers to Write for them.

Agricultural science is still in its infancy. "Darkness as darkness itself," hangs over the pathway of him who attempts to explore its fields.—In its present stage of development, some of its most important truths are incapable of demonstration. What one approves both in theory and practice another condemns. Philosophical deductions and practical experience are arrayed against each other. And yet its principles are as fixed in their operation as are the principles of any science; and when they shall have received the careful and philosophical attention which the coming years are destined to bring them, they will be found as demonstrable as are the truths of mathematics.

In attaining so desirable and important a result, we must rely in no small degree upon agricultural papers, It is their peculiar province to awaken inquiry, direct it in proper channels, and stimulate the energies of the laboring masses. That they have accomplished very much in this respect during the last decade, cannot be denied. We are indebted to them to a great extent for the increased attention which has of late been given to agricultural science. But broader and richer fields, sparkling with rarest gems, are opening before them; all the sciences are coming to their aid in clearing away the mists that have so long enveloped the great truths of agriculture; educated intellect is anxious to pay its *devoirs* to those truths; the best disciplined minds of the age are reckoned in the lists of practical agriculturists. But whatever offerings science may bring, whatever discoveries she may make, actual experience must attend her *pari passu.*

Upon farmers, therefore, devolves a sort of moral obligation to give to the world, through the medium of agricultural papers, the results of their experience. And, dear farmer, when you experiment let me persuade you to do it with the *utmost care* and *exactness*—thus the *reflex* influence of your experiments will be no small part of the benefits resulting therefrom.—When we can bring to bear upon the disputed points of agricultural science the careful experience of thousands of practical men, we shall have done much towards their settlement, and therefore much for the benefit of the world. No subject offers a richer reward to patient investigation.

SENIOR.

## Weevils and other Grain Insects.

*To the Editors of the American Farmer:*

I observe upon the first page of the last number of your American Farmer, accounts of various methods for getting rid of weevils and other insects, which produce such sad havoc upon our grain after being garnered. Without wishing to detract from the merits of the methods of others, I would state that the method which I have observed, and which I have thoroughly tested by experience, has the merit of being very cheap and convenient. It is simply to sweep and clean out the granary, and then wash it all over on the inside with strong pickle of common salt. This drives out all sorts of insects and worms, penetrates the timbers of the barn, and kills the worms which are so apt to get in them and cut them—and preserves the timbers in a wonderful manner. After this process is repeated for several times, the timbers of the barn become saturated with the salt, and will not decay for one hundred years. The pickle should be carried up and thrown upon the joist and sides of the barn, until the whole is thoroughly wet. If this is worth anything to the public, they are welcome to the results of my experience.

Yours, truly,

AUGUSTUS HOLLEY.

*Ashland, N. C. Sept.* 1857.

---

*From the Southern Planter.*

## The Drilling of Part of every Pea-Crop, both a Benefit and a Necessity.

In the three years which have passed since my communicating to the Virginia State Agricultural Society an article on the "properties, value and culture of the Southern Pea," my experience and observation have enabled me to correct some of my then errors of opinion, and of practice. Such errors, and the consequent false teaching, when likely to mislead other persons to their loss, it is the duty of every writer to correct—as I will now attempt.

When formerly treating this subject, I preferred and practiced broad-cast culture, without exception. For while admitting the superior productiveness, in seed, of drilled and tilled ground, I then supposed that broad-cast sowings would always yield enough seed for the next crop, and a better general return for the labor employed altogether. This opinion was then opposed to the general practice of North Corolina, which was drill-culture, wherever the pea-crop occupied the ground exclusively. While still preferring broad-cast to drill-culture for the larger portion of the pea-crop, and when it is especially designed as a manuring crop, I have latterly learned to admit my former mistake, and the superior advantages of drill-culture, for a portion of the crop—and for all very early seeding, and for as much of the field as will supply plenty of seed, or as is desired to be gathered.

When land is in the best condition of pulverization, tilth, cleanness, and degree of moisture—and the weather is warm enough, and the season far enough advanced, for peas to sprout quickly, and then to grow rapidly—it will be safe, and also the cheapest and best mode to sow broad-cast. Especially is this mode preferable, under these circumstances, when the crop is wanted merely to be ploughed under, as manure for the land, and preparation for the next succeeding crop of wheat, or cotton. Under the favorable conditions stated, and with ploughing and sowing not too early, a good growth and cover may be expected, and a clean crop, to be obtained by this most rapid and least costly mode of preparation and seeding, and without any subsequent labor or care. It is true, that the richer the land, and the thicker and ranker the growth of vines, the less abundant usually will be the product of perfect pods and seeds—if not absolutely less, at least relatively, or in proportion to the general growth of vines. This deficiency, however may not be very important, when all the product is to be ploughed under for manure.

But even when all the conditions for seeding are deemed favorable, wet and cold weather, succeeding the sowing, may check the growth, and cause the fox-tail grass, on stiff soil, and rag-wort and other worthless weeds of lighter soil, to spring among and out-grow the pea-plants—and, in proportion to their prevalence, to take their place, and prevent the production of the crop of peas. And this substitution of worthless weeds for a valuable crop, will be much more general when (as is unavoidable in many cases of large sowings,) the conditions of time, season, and soil, were more unfavorable. Hardy as is the pea-crop after it has been well started in growth, it is ill able to withstand cool weather when very young. And a cloddy (though well ploughed and clean) soil, if hot and dry, is as injurious to the springing of late-sown peas. When this crop is sown broad-cast largely, or occupies one field and year of the rotation of the farm, it is almost impossible to prevent a large portion suffering from one or both of these different evils. In the climate of lower Virginia, (or of the lands next below Richmond,) it is too hazardous to sow peas (broad-cast) before the 20th of May—and it is much safer, and better for the crop, if the sowing is embraced in all the month of June. If beginning any earlier, a cold spell of weather may soon after occur, and suspend the growth of the young plants, while the hardier weeds and grasses, less impatient of cold and wet, grow and get ahead of the peas, and prevent much of what otherwise would be their subsequent growth and luxuriance. Sill more, there are innumerable small bugs, (spotted beetles,) which prey upon the leaves of the young pea-plants, eating hole through the seed-leaves, and from whose depredations scarcely a leaf escapes under these circumstances.—This is the only insect plague, or disease, that I have observed to damage the pea-crop.—These insects always attack the young peas, especially when in the seed leaf. But when the weather is warm, and the young plants are growing rapidly, these depredations are scarcely perceived, and cause no appreciable injury. But when cold weather checks or stops the growth, the insects are very destructive, and (with the aid of the fast growing weeds,) will nearly destroy a previous thick stand of pea-plants. If, to avoid this frequent ill consequence of early sowing, the farmer waits for settled warm weather, he is as liable—indeed almost sure—to meet the equally great evils of soil too dry for good preparation, a cloddy seed-bed, and consequent failure of numerous seeds to sprout, or sprouting merely to die for want of moisture for their as yet superficial roots. Besides, in all June there is so much of other and important labor required, that no farmer can then prepare for, and sow, an entire field in peas. And after our wheat harvest is begun, nothing else can be attended to, until it is finished. Afterwards, it is too late to sow peas, for their full maturing, and their best manuring products. Still, (on wheat-stubble especially,) all other conditions are so entirely favorable to the ploughing, seeding and growth, that our cleanest and most profitable covers of broad cast peas, for preparation for wheat, are obtained from such sowings, made immediately after removing the previous wheat crop, and not later than July 10th. But because of the heavy demands for labor, at that time, on a wheat farm, this excellent practice cannot be extended over much space.

On these grounds, while I still prefer, and recommend to others, broad-cast sowing for all land sown in settled, warm weather, and in good and clean order, I now advise drill sowing, and some subsequent cultivation, for all the earlier, (and otherwise too early) seeding. The ready objection to this is the greater amount of labor required. It is true, that for the space sown, drill culture requires much more labor; but much less, if compared with the amount of crop grown, and the case of securing it for use. If, by too early sowing, (for any particular season,) part or all of a field sown in peas is over-run by tall weeds, and but few pea-plants survive, it may by courtesy, be designated as "pea-fallow;" but, in fact, it is merely a weed-fallow, on which the labor of preparation and the sowing of peas, have been expended almost uselessly. No kind of culture can be more expensive and losing than this, no matter how small the outlay to the acre. And in this way, to more or less extent, every extensive broad-cast sower of peas must suffer in every year. On the Marlbourne farm, in some years, the very general over running, or smothering, by weeds, of the earlier-sown pea-crop, has occurred on from one-third to more than one-half of the whole field, or greater breadth of sowing. In such cases, the loss of the crop as manure is not all.—At least twice as much seed is required for broad-casting as for drilling—and the vines thus over-topped by weeds, will not yield enough peas to pay for the gathering. And even on the parts of the ground where the growth of pea-vines is clean and unmixed with weeds, yet if it is very thick and luxuriant, there are often too few pods and seeds to be worth the cost of gathering. Such is generally the case this year—and almost entirely on the farm mentioned.

If, then, the different labors of broad-cast and drill culture are compared, (not as to the extent of surface severally so treated, but) in regard to the products from each, it will be found that the drill mode of culture, for all early sowing is much the cheapest and most profitable. For it is safe to drill some length of time before it will do to trust to broad-cast sowing. In either case, the young plants are equally checked by cold weather—and while so suspended in growth, are equally liable to the depredations of bugs.—But, during this time, while hardy weeds are growing equally among and over-topping both, they will remain to smother the broad-cast peas, but will be destroyed by the slight subsequent tillage of the drilled plants. If these but barely keep alive until warm weather comes, and they are then tilled, the weeds are killed, and the peas will grow and thrive well. I witnessed this process, with these results, this year, in a row of peas planted very early, and of which the young plants were so damaged by cold and insects, that they would have died if left without weeding. But with very slight and early tillage, this row not only splendidly and entirely recovered, but was remarkable for its good products.

Now, I do not advise the abstracting of a single day from the time proper and safe for sowing peas broad-cast, to be given to the slower method of drilling and subsequent tillage—but only the earlier time, which would be unsafe for broad-casting. Whatever may be the time deemed safe to begi the latter operation—whether May the 20th or June the 1st,—drilling might have bee begun safely some ten days earlier. For s much of the field as could have been drille in this time, the land might have bee ploughed at any leisure time of the precedin winter or early spring; and these ten day so given to drilling, would be a time whe there is much less demand for labor tha afterwards, and during which nothing els could have been safely done in seeding peas These ten days, and thus in advance, woul enable a farmer to drill one-fourth of hi field. So when the time for broad-cast sowing arrived, (and otherwise the earliest saf time for seeding,) his general and forme labors of seeding would be lessened by as much space as he had already drilled. His entire seeding would be so much the sooner completed, and the more likely to be all performed in good conditions of soil and weather. This earlier finishing, if by five days, will afford that much time (then or later,) for running cultivators, or ploughs, over the drilled peas, and giving the slight hand-hoeing or weeding necessary to destroy the first weeds. If nothing more should be done, the crop will be much cleaner and better than of the later-sown broad-cast peas. And a second and later and shallow ploughing, would be all that would be desired for the best production. There would be, indeed, considerable more cost of tillage. But, in compensation, there would be a saving of seed, a clean and full crop of peas, and the pods so much more abundant and perfect, that twice as many seeds could be gathered as is usual or practicable from broad-cast vines. This is the testimony of the largest pea-farmers of North Carolina, who raise, and gather by hand, nearly all the peas that are sold in our markets.

There is another aspect of this subject which deserves notice. Drill culture, to whatever extent it may be convenient to be adopted on any farm, will always be early

ding, and induce earlier maturity of the
-crop. Thus, if serving to advance the
turity of the latter portion of the general
ving, by ten days, it may double the ma-
ring value of the products of that latter
tion of the crop. For unless the seeds
fully grown, I believe that the best ma-
ring value of the pea-plant has not been
med. I would expect but little of manur-
benefit from a cover of peas ploughed
der before any pods were grown—or (as
e closet-farmers earnestly enjoin as essen-
l,) when the plants are just in blossom.—
our Piedmont region, the trials of the
-fallow have been, as generally found, or
posed to be, of no benefit, as they have
en certainly beneficial in the tide-water
ion. I do not dispute these alleged facts
failure, sundry of which are of the exper-
ents of farmers whom I know well, and
n whom there can be no better authority.
ither can I pretend to account for this
nt of benefit so different from all experi-
ced and reported elsewhere. But this is
tain: the best growing (or hot) season, is
short, even in lower Virginia, for the best
duction of the pea-crop—and still less
orable is the climate as the mountains are
proached. I thence infer, that in most
ses of trial in the higher country, the pods
l seeds were not enough advanced in
wth to have reached their mature and
portant value as manure. This may not
the only reason for the comparative inef-
cy of the pea-crop in the upper country.
t so far as the late maturing is an obstacle
profitable production there, the drilling
uld go far to remove that objection. If,
this means, the time of seeding could be
ely advanced ten days, and thereby as
ch the time of maturing, the profitable
duction of the crop may be extended one
ndred miles farther North and West, beyond
previous limits of broad-cast culture.

n this and the preceding year, the broad-
st pea-crops have been very unproductive
grain. Broad-cast culture has been greatly extending in late years, and consequently the demand for seed has been greater than the supply. Peas which formerly were sometimes as low as 40 cents the bushel, were, last spring, as high priced as $1 40 to $1 50. If every farmer, who sows peas, would drill but one-tenth part, (and that of the poorest part) of his field, he would not fail to obtain a plenty of seed, and could gather them at half the labor otherwise to be incurred—or for one-third of the cost of buying them, at recent prices. As long as broad-cast sowing is the general course, the price of peas must continue high—and that will render the crop of grain (or seed) profitable, not only for home use, but for market, for all drill culturists, who are favorably situated as to soil and climate.

It is proper to add, that while I have had abundant experience of the stated disadvantages of broad-cast culture, when it was too early or very extensive, and the attendant failures of products, both of grain and vine, I did not try drill culture while I continued to be a practical farmer—and that I derive from information, and the experience and observation of others, all the facts above stated of the superior products of drill culture.—The reasoning upon and deductions from these facts, for which I am responsible, the judicious reader may decide upon as well as the author.

EDMUND RUFFIN.

*Marlbourne*, Nov. 6th, 1857.

## Weevil in Wheat.

The Richmond Dispatch, in publishing the subjoined remarks on the subject of the weevil in wheat, states that they are from the pen of one of our most scientific entomologists, and justly commends them to the attention of agriculturists;

As so much has been published in the newspapers lately in regard to the "weevil" being found in the seed-wheat alledged to have been sent by the Patent Office, I deem it merely an act of justice to state a few facts in the natural history of that insect to disabuse the public mind of the idea of the great danger of using this wheat for seed.

The true weevil is the *calandra granaria*. or grain weevil, there being likewise another of the same kind, the *calandra oryzæ*, or rice weevil, which destroys grain and rice in the South. These small brownish beetles lay their eggs upon the wheat, when housed or in the barn, and not upon the unripe grain in the field; the young grub eats its way into the grain, and after almost entirely burrowing out the interior, changes into a pupa, having the legs, wings, &c. so formed as to be plainly distinguished by the naked eye, but being incapable of locomotion. After remaining some time in this state it eventually makes its appearance in the outer world as a perfect weevil to lay the foundation of a new colony of weevils in the stored and ripe grain, which is frequently destroyed by successive generations of this pest. Therefore, being entirely grain eaters, and not destroying either blade or blossom, they could not do much injury to the coming crop; even if they withstood the inclemency of the winter and the moisture of the earth the perfect beetle could find no grain whereupon to deposit its eggs, except in store houses or barns, in which, no doubt, there are thousands already, as the weevil is even now disseminated throughout almost every State in the Union.

The caution in the newspapers has most probably arisen from the fact that a two-winged fly, also known by the *misnomer* of the weevil is very destructive to wheat and other grains, when forming seed. This insect is more properly known as the wheat midge, (*cecidomyia tritici,*) and has the appearance of a minute orange-colored gnat. It deposites its eggs in the heads of wheat, barley, rye, oats and even grass. These eggs being hatched, very small orange-colored grubs appear, and, hiding in the head, extract the juices of the plant, thus causing the ears to be totally abortive, or else to produce very shrivelled grain.

There is yet another insect also misnamed the "weevil," quite different from the two alreaby mentioned, inasmuch as the first, the true weevil, is a beetle with hard wing cases, the second a fly with two transparent wings like a gnat, and the third a real moth, with downy or scaly wings, which latter might be mistaken by a casual observer for the clothes moth, such as infests houses and eats carpets, cloth, and fur. The caterpillar of this moth, named the augumois moth (*anacampis cerezlella*) devours the inside of grain, and, before changing into the chrysalis, gnaws a small hole almost through the outer cuticle of the wheat, then spins itself a web or cocoon, in which it changes into the chrysalis, and eventually makes its appearance as a minute moth out of the hole previously prepared for its exit.

From this short and imperfect sketch of the "weevils," so miscalled in various parts of the country, it may be seen that no danger is to be apprehended from the calandra or weevil, said to be contained in the Patent Office seed, for if the grain be immediately sown, as it ought to be, and the package not suffered to remain open, where a perfect beetle can fly to barns or storehouses, the insect must necessarily be killed by the cold and dampness of the earth, or even should it survive it could find no ripe grain in the cold and open field whereupon to deposit its eggs and perpetuate its race.

VIATOR.

Richmond, (Va.) Jan. 20, 1858.

Our contemporary of the Dispatch suggests in regard to "this insect, which annually destroys hundreds of thousands of dollars' worth of wheat," that "farmers should keep their granaries as clean, if possible, as their parlors, and above all well ventilated. They should especially take care not to leave even a small quantity of seed throughout the year in a granary; for the old seeds are likely to contain the enemies that will attack the new crop as soon as housed. These are the best precautions against the dreaded insect. Keep your wheat as dry and as cool as possible."

## The National Agricultural Congress.

Washington, January 15, 1858.—Col. Burgwyn, of North Carolina, said that the regular business of the day being in order, he would introduce to the Society Mr. Leonard Wray, of London, formerly a resident of Caffraria.

Mr. Wray proceeded to sketch the circumstances connected with the discovery by him of the varieties of Imphee. He had in 1850 occupied the post of Cashier of the East India Railway Co., but the climate of India becoming detrimental to the health of his wife, he had visited the Cape of Good Hope. Subsequently hearing of the salubrious climate and favorable soil of Port Natal, he had moved there and made it his home for three years. Around the huts of the native Kaffirs, and growing wild in the fields of the vicinity, he had noticed a species of plant similar to broom corn, but the stalk of which was filled with an exceedingly sweet pith, so sweet, in fact, that the idea occurred to him that the expressed juice must be exceedingly suitable for the manufacture of sugar. Inquiries which he frequently made, convinced him that the natives cultivated the Imphee solely for the purpose of chewing the stalk and sucking the juice. Efforts had been made by intelligent colonists to make sugar from it, but with no success. No way discouraged, he had sent his Kaffir servants to collect as many different varieties as they could find; and the seeds of all of fifteen kinds he had planted, and from their juice had, after repeated failures, succeeded in making excellent sugar. Elated by his success, he had kept his process of manufacture a profound secret, had quietly collected a large amount of seed, and had visited Europe to introduce his discovery to the notice of the civilized world. Arriving in France in 1854, he had exhibited his plants and sugar at the *Exposition Universelle*, and been awarded the silver medal of the Exposition.—He had had the assurances of Count Gasparin that the gold medal would be awarded to him, but that gentleman having been stricken down by appoplexy the other members of the Commission had awarded to him only the silver medal. To prove that he had not, as some of his detractors in this country had asserted, bought the medal, he begged leave to present a copy of the Siecle newspaper, which contained a full report of the appearance of his Imphees, and noticed the award to him of the medal.

This testimonial he placed in the hands of the President, who having examined it, passed it to members for inspection. It is a very beautiful silver medal, having on one side a most truthful and exquisitely-cut likeness of Napoleon III. The reverse is adorned by a richly carved wreath of laurel. Mr. Wray gave as his opinion that the so-called Chinese Sugar Cane was nothing but a variety of the Imphee, which in the palmy days of the Portuguese nation had been taken from their settlement at Delagoa Bay, on the southeastern coast of Africa, to China.—It was no more unlikely than a well established transportation of Brahmina cattle from India to Caffraria. The present race of Zulu cattle evidently owed their origin to this importation by the Portuguese. It was very remarkable that the Chinese Sugar Cane should so closely resemble one of his Imphees (which he held up for inspection) that they could scarce be distinguished, the one from the other, unless they were congeners. The Sorgho had appeared in France, being sent by Comte de Montigny, in the very same year as he was cultivating his Imphees in Africa, and it was an illustration of the sometimes wonderful workings of Providence, that the wanderer taken from the neighborhood of its congeners to the very extreme portion of the earth had met those congeners in a land foreign to both, arriving almost simultaneously.

The enterprise and inquisitiveness of the French did not slowly excite great interest in his Imphees, and the award of the silver medal and consequent publicity given to his plans, caused his receiving many applications for seed. He had, however, confined his cultivation in France to the estate of Count David de Beauregard, near Toulon, and to a farm near Bayonne. Although often desirous to visit America, he had not done so until the past Spring, when, having received a direct invitation from Gov. Hammond, of South Carolina, he had sailed from England, and arrived in New York in April last, bringing seeds and the sugar he had made. This sugar he would show to the meeting.

It consists of two samples of very good quality, which Mr. Wray showed at the American Institute last Spring. The members crowded around the speaker so much, in their anxiety to see the sugar specimens, that his remarks were suspended for a time.

He resumed by stating that in the island of Guadaloupe the Count de Chazelles had grown the Imphee in comparison with the common sugar cane, and in corroboration of this he handed to Mr. Olcott a copy of the Journal de Gaudaloupe with a request that the article recording the above fact might be translated. It certifies that the Count tried the juice of Imphee and sugar cane, both growing on his estate, at the end of the rainy season, and found to his surprise that the sugar cane juice marked but 7 degrees of Beaume's Saccharometer, while the Imphee juice was 10½, nearly 11. It had been basely hinted that he had introduced a plant into America which he knew was perfectly worthless, and he appealed to the gentlemen present to know if the facts presented would bear out so vile an insinuation.

Nearly his whole importation of Imphee seed had been planted on the estate of General Hammond. Most unfortunately for him it was found just before the ripening that there were amongst the Imphees numerous heads of Dourah corn. At Gov. H.'s request he had, in Spring, sorted out sufficient seed of some of his choice varieties to plant several acres in separate lots, but the great bulk of the cultivation, over one hundred acres, had been planted indiscriminately.—Although he did not himself believe harm would result from such planting, yet to avoid the semblance of a desire to impose mixed seed upon the country, the entire crop of *seven thousand bushels* and over of Imphee seed had been sacrificed to feed the cattle and hogs, with the exception of the crop on the few selected acres, and which amounted to only some four hundred and fifty bushels.

There was one branch of industry the interests of which would be largely affected by the introduction of the Imphees and the Sorgho. The enormous quantities of Grain annually consumed in this country and all the countries of the world—a consumption which at times causes the awakening of the gravest apprehensions for the effects it has upon the necessary supply of breadstuffs—calls loudly for the support of every well-wisher to his race to be accorded to plants which may be used as substitutes for the grain now distilled. The manufacture of alcohol would be the most lucrative and important branch of the Sorgho and Imphee culture. Mr. Wray had only the day before been advised, by a correspondent writing from France, that at the distillery with which he was connected the Sorgho had been extensively cultivated for distillery purposes, and they had found after working up their crop that the plant yields no less than 30 gallons alcohol, "strong proof," to the ton of stalks; that the crop was from ten to twenty tons per acre, and that the cost of cultivation was something less than $2 50 per ton of stalks. This certainly showed that it was not a perfectly *worthless* plant, the Sorgho and the Imphee being of the same species exactly —On Governor Hammond's plantation an experiment had been made which would show the value of the Imphee as compared with

Sorgho, if we consider the amount of sweet juice yielded respectively by them. Gov. H.'s son, his overseer, and Mr. Wray, had cut ten stalks each of Sorgho and Imphee, had expressed the juice of each lot, and on a careful measurement it was found that the Sorgho gave but eleven pints, and the Imphee two gallons and about an ounce. Any one familiar with the per centage calculations would see that between 11 pints and 16 pints there was a vast difference, and as this same kind of juice had marked 10½ Beaume at a subsequent trial, as would be testified to by a gentleman present, the members could judge whether or no alcohol making was not profitable. In conclusion, he would complete the testimony which he should lay before them by reading the following letter from Gov. Hammond:

REDCLIFFE, November 26, 1857.

DEAR SIR: I received to-day the Southern Cultivator for December. It contains two letters from Mons. Vilmorin, denouncing your Imphee in a manner that appears to me *malicious*, and as I know his statements are false as regards the Imphee grown in this latitude, I deem it due to truth and to you, to give my testimony against them. Your Imphee came here too late to allow a perfectly satisfactory comparison to be instituted between that and Sorgho. But I do not remember that in any attempt we made to compare them, the results were in favor of the Sorgho. Certainly, most of the varieties of Imphee have a larger stalk and produce more juice; none, I believe, are smaller. As to "red rot," which so seriously affected the Sorgho, I do not think it appeared at all in more than one kind of Imphee, and that had ripened long before we reached it in our operations. I am sure the Imphee is not *more* subject to the "red rot" than the Sorgho, and was not *so much* affected by it this year here. As to the per centage of saccharine matter in the juice, I saw the saccharometer mark 18 once, and frequently 14 to 16 per cent. I believe the Sorgho never reached 17 per cent.

From my experience of this year, I should be unwilling to say that the Imphee is decidedly superior to the Sorgho. But I am equally unprepared to say that any single variety of Imphee is inferior to the Sorgho. I shall try all of them again and again, before I determine which is the very best.

As you say Mr. Vilmorin obtained no pure Imphee seed from you, I am inclined to think he has not made his experiments with *pure* seed. Certainly the seed he sent to this country, last spring, for Imphee, at $10 per pound, was thoroughly mixed with Dourah corn, and one parcel that he sent as Vim-bis-chu-a-pa, was *all* Dourah, as I am informed.

I have not, as you well know, any interest in the sale of Imphee seed, or anything made from Imphee, and you are well aware of my aversion to having my name in the papers, but you can show this to any one you please, and, if absolutely necessary, publish it. I shall probably put the substance of it in the next Cultivator. Yours, very truly,

J. H. HAMMOND.

L. WRAY, Esq.

After reading this letter, Mr. Wray resumed his seat, amidst the applause of the whole audience.

Doctor Jackson said that he had been employed by the United States Patent Office to make investigations into the nature of the sugar contained in the juice of the Sorgho and the Imphee, and the result of his labors had been given in a report to that Office.—The brief, or synopsis of this he had shown to his friend Mr. Wray, when at his house in Boston quite recently, but had refused to allow him to copy it, because the matter belonged to the Office alone. He had very attentively studied the Chinese Sugar Cane, but had not had so much experience with the African Imphee. Specimens of the latter had been sent to him by Mr. Browne, and he had extracted from the stalks, by simple crushing and boiling, a large per centage of crystalized sugar. The same success had attended his experiments with the Sorgho, when two years ago he made sugar from stalks grown at the United States Arsenal in Massachusetts. The existence of the sugar he proved, although not without opposing assertions by other chemists. He had carefully computed the profits of Sorgho culture—300 gallons per acre was an average yield of syrup. The juice of Sorgho and Imphee give 9 per cent. of cane sugar, and 15 per cent. of saccharine matter in all, 6 per cent. being *glucose*. It gave 12 per cent. of alcohol, or proof spirits. The aroma of the alcohol made it peculiarly suitable for making brandies, and the mere addition of burnt sugar would give it all that rich color which brandy had. The production of a great quantity of seed would interfere with its secretion of sugar.

Mr. Wray said the Kaffir custom of planting only immature seed for the sugar crop, he thought an excellent one; for the unripe seed having a feebler energy, has a tendency to keep the plant in a more sugar-bearing and a less seed bearing condition.

After some discussion the Society unanimously adopted the following resolutions:

*Resolved,* That in the opinion of this Society the facts presented and the testimony adduced by Mr. Leonard Wray, show that the Imphee has attracted the attention of some of the most illustrious agriculturists of Europe and this country.

That the Commissioner of Patents be requested to test, through his correspondence or otherwise, at the earliest practicable period, the capacities of the Imphee and the Sorgho.

And, that the members of this Society will use their individual exertions to test their comparative capabilities, and report the results to the Patent Office Department.

*From the Southern Planter.*

## "Cattle Dying from Eating Corn-Stalks that Hogs have Chewed. What Causes it?"

The above question is asked us by our friends of *The Valley Farmer*, who copied our remarks on the cases of Mr. Effinger's, of Rockingham, cattle. We cannot answer the question. But we know the fact; and have given instances in the Planter in which the experiment was tried on cattle, one at a time, with a fatal result. The disease, commonly called *mad itch,* is not due solely to corn-stalks previously masticated, but has been known to occur in a cow eating pea-vines, who died not of simple *hoven*, as might be supposed, but with the peculiar symptoms of *mad itch.* Food, then, of a very high degree of succulence may, but rarely does, produce it. Nor does it seem due to the dryness of the material taken into the stomach, (or rumen, the seat of the disease,) for dry straw and stalks, which many cattle live on all winter, are not known to produce it. Possibly, though it is unphilosophical to guess, the disease is one of a very high degree of inflammation of the rumen; the fibre of the corn-stalk, whose pith has been thoroughly broken down, and its juice extracted, by mastication, presenting a number of irritating points, as sharp as so many splinters, to the coats of this organ, may so irritate them as to produce at once acute disease with attendant indigestion. We have had an opportunity, on several occasions, to see a similar state of things on cutting open cattle that have died of *red water*, (or bilious fever?) In such cases, where death has occurred prior to diarrhœa, the contents of the paunch have always been exhibited in a compact dry mass; and there has been a high degree of inflammation of their receptacle. Sheep, we have been told, are sometimes affected in the same way when fed on very hard and dry forage, such as over-ripe timothy hay, which has been known to pierce through all the coats of their paunch.

Cannot the *Valley Farmer* persuade some of its grazing friends to sacrifice a scrub to science next fall, and have a regular physician to make a *post mortem?*

We warrant the scrub dies.

Weevil.—These troublesome pests may be kept out of grain by using salt. Sprinkle a little fine salt on the bottom and around the sides of the bin as you fill up, and over the top when full. Wheat kept in old salt barrels will never be destroyed by the weevils.

☞ Snow! to the depth of about five inches, fell here on the 12th inst.

☞ Every Farmer should take the Planter.

# Editorial.

## RALEIGH, FEBRUARY, 1858.

### Agents Wanted.

We want active, persevering Agents, in every county, district and neighborhood in this State, and all the Southern States, to whom we will allow a liberal per centage on all cash subscribers obtained for the North Carolina Planter. And we wish it to be distinctly understood we take no credit subscribers. Postmasters and others who may be disposed, are requested to act as our Agents in procuring subscribers, to whom we will allow a liberal per centage. To active, enterprising men, who will attend the Courts and public gatherings, this agency can be made to pay well. Specimen copies sent to those wishing to act as Agents. For further particulars, address,

A. M. GORMAN, Raleigh, N. C.

◆

☞ The February No. of the Planter appears about the middle of the month. The March No. will appear about the first of March, and the succeeding Nos. will appear regularly thereafter on or before the first of each month.

◆

Apology.—We found on perusing our first No., after it was printed off, several very ridiculous typographical errors, which the printer had failed to correct although marked on the proof-sheets. For instance—in the 7th line, 2d column of page 4, the words "general hirol" (ridiculous nonsense) should have been *agricultural*. There are several other errors, most of which, however, the reader is able to correct for himself. The printing of some of the copies was also badly executed, owing to the forms being injudiciously arranged for the press.

We regret to have to apologize to such an extent in the commencement of our enterprise—but all new publications have their difficulties which it is almost impossible to rectify in the first No. The present is a very decided improvement on the first No., and it is our intention to continue our improvements as rapidly as our patronage will justify. We hope to be judged by each future No. of the Planter.

### Take Notice.

We sent the first issue of the N. C. Planter to a large number of persons who had not signified their intention to subscribe to it.—We did so in the hope that they would be sufficiently pleased with it to forward their names, with the money, to become regular patrons. We shall not send any other Nos. except to such as have paid or shall hereafter pay the subscription price in advance. We do not intend to force our paper upon those not wishing to have it; and we suppose those wishing it will give us the information, as intimated above.

We send copies of this No. to the Postmasters, with the request that they will let it be known that the February No. has been received. And to all who send us five subscribers and $5, we will furnish with the sixth copy gratis.

### That Immense Yield.

We find considerable inquiry has been excited, and great incredulity expressed, concerning the immense yield of corn stated to have been raised in Halifax county, N. C., in an article published in the January No., entitled "Application of Fertilizers." The article was not original in the Planter. We copied it from a Virginia paper, (printed at Orange Court House, we think) where it was inserted without credit as to its origin, and was published by us just as we found it. We had no doubt of there being some mistake in the figures, as to the amount of corn produced on the acre, but being unable to make the correction, we had to print according to copy, hoping it would be the means of introducing us to one of the many excellent farmers of Halifax, who would, over his own signature, make the proper correction.

We hope the Author of the article in question will give his agricultural brethren his name, and the yield in correct figures, if those published are erroneous;—and also give us his experience in the application of Fertilizers—his remarks upon which, alone induced us to publish the article in question. It is due to himself that he should be heard from. It has been suggested to us that the error in the yield above referred to, probably consists in this:—instead of reading—"60 barrels or 300 bushels to the acre," it was intended to read—60 barrels or 300 bushels on *three* acres, &c.

If this correction be the proper one, we find one recorded that excels it almost double. At the State Agricultural exhibition in Indiana, the award of a silver pitcher was made to a person who had raised 857½ bushels of shelled corn on five acres—or 171½ bushels to the acre. The American Agriculturist says this is the largest yield of corn on record.

## Price of Guano Reduced.

We learn by the Prices Current of the Southern Farmer, that the Peruvian Government Agent in this country has reduced the price to $55 per ton. This, says the Planter, looks more reasonable; still we think it might be reduced yet more, and prove more profitable both to the Peruvian Government and our farming interests. If the price were reduced to $45, treble the quantity would be used that now is; as it would then be remunerative applied to any crop; while at the present price it only remunerates the tobacco ground.

Under the previous rates it was manifest that Guano was rapidly falling into disuse in this part of the country. What effect the present fall may have in renewing the demand can be only matter of conjecture. It cannot, we think, fail to have some effect—perhaps considerable. But what with the present and prospective low prices of agricultural products, with the exception of tobacco; and the growing belief that Guano does not act with the same energy as formerly; the consumption will probably not be again as great as it has been during the few past years. Many farmers have come to the conclusion, that after counting the cost the net profit has been inconsiderable, and the cost of application, even under the change of prices, will not be diminished by more than a dollar per acre

## The Sorgho and the Imphee.

As there is considerable diversity of sentiment as to the relative value and adaptation of these plants in Southern agriculture, we give in another place an extract from the proceedings of the U. S. Agricultural Society in which the merits of the latter are efficiently vindicated. It is the opinion of most of the Southern agricultural journalists, who have spoken on the subject, that they are both valuable additions to the agricultural resources of the country, and especially to the Southern States north of the present limit of the cultivation of the Sugar cane.

## The Winter Oat.

We believe that this is now considered to be decidedly the best Oat known in this part of the country; and we learn that some of our practical Farmers, who have been testing them for the last two or three years, are so well pleased with them, they are gradually discarding all other varieties.

They will yield, it is said, one third more to the acre than the common spring oat—and the straw being finer and much softer to the touch, is of course better adapted to feeding purposes, as stock like it better and will eat it cleaner, while at the same time the *grain* is heavier. When these oats were first introduced here, it was feared, and not without some ground, that they would not stand our hard freezes ; and experience has sadly taught some of us, that unless they are sown early enough in the fall to enable them to take good root before hard weather sets in, there is great danger of their being " killed out" ; especially by such winters as was the last. This may be considered an objection by some, but it is one that will apply equally to wheat, and other winter crops.

During a mild winter—such as the present one—these oats, having reseeded themselves, as it were, on the last year's stubble, afford at this time a capital pasture for stock ; and fortunate are those who may happen to have a good pasture of this sort ; at a period when milk and butter are as scarce as these commodities seem to be at present. Indeed, we have heard several gentlemen say, that they had such fine stands of these "volunteer oats," they were strongly tempted to let them remain, under the belief that they will produce a good "second crop," without the trouble of re-sowing ! Now, if they will do *this*, they are bound, we think, to become a *general favorite*—especially in '*old Wake.*' We hope some of our friends will try the experiment and report to us the results.

There is another fact, connected with this Oat, which we do not think is generally known, viz : they may be sown in February or March, with nearly as good returns as in winter. Indeed it is deemed advisable by those who have fully tested it, to *defer sowing* until Spring, unless they can be seeded in October, or early in November. H.

## A Word to Planters.

An exchange says, and we adopt the following:

"It is the duty of every tiller of the soil to write for his State Agricultural paper.—He can find an odd hour, every two or three months, to write a brief account of the results of his cultivating the earth, and we know his brother farmers will find time to read his letters. Do so then, at once : give us the fruits of your experience and facts, if you have not time to write anything more.

Short letters are best : so give us your ideas in a compact form. We should like to hear from some one upon sheep, swine, poultry—upon manures, the various modes of cultivation as at present in actual use, &c.

## Is it Superstition?

One of our cotemporaries says—Tradition has handed down, from time immemorial, among farmers, some peculiar notions about the influence of the moon on vegetation, &c., which the skepticism of modern agricultural writers have generally agreed in rejecting as relics of a superstitious age.

The human mind is so constituted that, like the pendulum, (which, when made to swing on one side of the centre of gravity, will vibrate to the opposite extreme) it has ever vibrated between the opposite extremes of superstition and incredulity, and reflecting minds are beginning to come to the conclusion that, generally, in the zeal manifested to reject everything that savored of superstition, a great deal of truth has been thrown away.

We have been among the number of thousands who have heretofore summarily rejected the idea that the moon had any influence over vegetation, but in reviewing a controversy upon the subject now going on in some of the public journals, we are induced to hold our judgment in suspense, and wait for more light upon the subject.

## General Agent.

R. R. Hudnall, of Raleigh, is General Agent for the North Carolina Planter.

## The Color of Soils.

When a farmer goes to look at a piece of land with a view of buying it, he very naturally examines the color of the soil, and by this forms his opinion of the value of the premises. If it is black or dark, he at once sets a higher estimate upon it than if it were of a light color. This is generally understood, but the reason of it is doubtless often overlooked. A light colored soil may possess the same elements of fertility that a darker soil does, and yet the former may never yield as much per acre as the latter. We account for that in this way:—It is well known that in the summer season a dark colored coat is much warmer than a white one, though the texture and material of the two fabrics may be precisely the same. This is because the dark colored fabric absorbs more rays of heat than the white one. Upon the same principle dark soils are warmer than those of a lighter color—they become warm earlier in the Spring—and retain their warmth longer through the Summer nights. Any barefooted ploughboy will certify to this fact any morning. He knows how much colder to his feet the light soil in the furrow is than when he drives through the dark colored loam. The heat penetrates—is absorbed, by the dark soil, while the light one reflects it and forms a crust on the top.

We incline to the belief that the discrepant effects of concentrated manures, such as Guano, upon different soils, may be accounted for upon this theory. We have seen Guano sown with wheat upon white, sandy soils, and have tried the experiment ourself, and without scarcely any visible effect, while the same quantity sown at the same time upon soils of a darker color produced the most satisfactory results.

Stable manure is generally regarded as the best among all the fertilizers. "Give me plenty of stable manure, and I would'nt give you thank'ce for all the Guano in Peru," says the old farmer. It has been remarked that stable manures are more prompt in their effects upon light-colored, sandy soils than any others. This may be owing in part to its great want of fertility formerly, but more perhaps to the mechanical and thermal effect of the manure itself. It renders the soil darker, warmer and consequently abundantly more fertile, as it brings with itself the proper elements to be assimilated by the growing plant, and furnishes the degree of heat neccessary for the proper development of the crop, by becoming a medium for thermal influence

If there is truth in the theory we have briefly set forth, much of the conflicting experiments of different observers could be reconciled. Of one thing we are certain: concentrated manures do produce magical effects upon soils already dark and warm, while upon white, sandy fields, their effects are anything but satisfactory.

We hope our agricultural friends will take these things into consideration; and to test the matter, let the red dirt next dug from a cellar be hauled and spread over a lot of white, sandy ground and note the effect.

## Hogs vs. Dogs.

"What a dog lives upon will keep a hog." If anybody doubts the truth of the saying, let him kill his useless dog and put a pig in the pen and give it the dog's allowance. He will find in a few months that he has a fine fat porker fit to be eaten, a use the dog could not be possibly applied to by any christian man. There are too many dogs in the country, by far too many—if they had all been killed a year ago there might be two hundred pounds of good fat pork in the country to balance against every dog so set aside, which would be no inconsiderable item in the present scarcity of supplies. Dogs are a nuisance and should be taxed. While every farmer keeps his dog, and every slave his dog, and every free negro his two or three dogs, sheep stand a poor chance to get through the world and yield their annual fleece with untorn throats. The increase of the dog population accounts for the scarcity of sheep. We shall speak of this again.

## Black Hawk Stock.

There are at Clayton's Livery Stables, in this city, two beautiful Stallions, of the Black Hawk Stock, which it is worth several hours' ride to see. For beauty of symmetry and handsome carriage, we do not believe they can be excelled. The superiority of this Stock of Horses is well known, and we do not believe the Executive Committee of our State Agricultural Society could better employ the amount of money asked for the black, than by using it in his purchase, and thus give our people an opportunity of securing this noble breed. We are not alone in the opinion, that our State Society ought to aid in introducing this valuable blood among us.

The Horses will be at Clayton's Stables for several days, and we hope such members of the Executive Committee as can do so, will call and see them; and we further hope, that the sight will induce them to make a purchase. We feel confident the Society will not only sustain them in the purchase, but thank them for the public spirit which such action will manifest on their part.

*For the N. C. Planter.*

Messrs. Editors: Great fears are entertained in the country, as to the fate of the hogs next summer, in consequence of the large bitter mast to be found in the woods and on which the hogs are now luxuriating. The fear is that next summer the hogs will all die, as it is certain the bitter mast has a bad effect on them. I desire to ask some of your contributors, what plan to adopt to counteract the bad effects of the bitter mast.

FRANKLIN.

Feb. 1858.

We have heard considerable anxiety expressed on the subject referred to by our correspondent; and hope his inquiry will elicit something that will prevent the apprehended disasters to the Hogs. The "Hog crop," is a department that must be better attended to in North Carolina, or our citizens must suffer for the want of their necessary annual supplies. The difficulty in procuring Pork this winter demonstrates this fact. The scarcity was attributed to the great number of pigs destroyed by the severe weather of the previous winter. It is to be hoped that the "Bitter Mast" will not cut off the Hog crop the coming spring and summer.

☞ Look well to the wet, marshy places along the branches running through the field where you are to plant corn this Spring. These spots are the very best ground in your field, and unless you treat them properly you will gather no harvest from them. The sooner you commence preparing them, the better. Ditch them thoroughly and fill in with the loose stones from the hills, forming a rough tile drain. If properly constructed they will become dry, and the first crop will more than pay the expenses of construction.

## Western Agricultural Society.

It is proposed by a number of gentlemen who are deeply interested in the progress of Agriculture in the West, that the counties west of the Blue Ridge form themselves into an Agricultural and Mechanical Association, for the purpose of improvement and the more general diffusion of knowledge in the various branches of Agriculture and the Mechanic Arts. This Association to have its Central point at Asheville, at which point there will be an Annual Exhibition. The plan will be more fully explained in a circular addressed to different gentlemen in the respective counties, which will in due time appear in the columns of this paper.

The necessity of some such stimulant as this will be very evident to all who are in any degree acquainted with this section of the country. We are not known abroad and the value of our many productions is not properly appreciated at home. The Blue Ridge section of N. C. has within its borders, in luxuriance, such a variety of products as cannot be found in any other section of the State equally as large, and we are of the opinion that an Agricultural Fair could be gotten up which would equal or surpass anything of the kind our State has ever seen.—*Our cattle and horses cannot be surpassed.*

We invite the earnest attention of all who are in favor of the advancement of the West and her interest to this subject. It should not be allowed to fall, for that would be acknowledging that we are not capable of making a good show, which all know is not true. We shall refer to the subject again and shall press it upon our people from time to time until the work shall be accomplished.—*Asheville Spectator.*

We copy the above with very great pleasure, and hope soon to record that the Association has been formed, and is accomplishing much good (as it cannot fail to do) for the Agricultural and Mechanical advancement of this interesting section of our State.

Situated as is the trans-montaine section of North Carolina—remote from the centre, and difficult of access to and communication with, even the western counties east of the Ridge, they cannot participate in our State Agricultural Society. It is imperative, therefore, that they organize a society in their own midst, if they would advance their interests and develope the richness and value of their important section. They shall have our hearty aid in effecting the noble purpose contemplated in the article above quoted.

---

Cotton Advancing.—By the arrival of the steamship Indian, which sailed from Liverpool on the 27th January, we learn that cotton has advanced ¼d., with still an upward tendency. There were more buyers than sellers. We are confident this staple must continue to advance. The tight times which produced the late decline, are rapidly subsiding—business is improving—suspended manufactories are resuming operations, and a largely increased demand for cotton will soon be made. Let cotton holders wait a little, and we have no doubt they will realize on their sales two or three cents in the pound over present prices.

Flour and wheat are reported very dull and prices irregular. Corn in active demand and advanced 6d. a 1s. Provisions dull.—Rosin dull at 4s. Spirits Turpentine firm at 36½ at 37½ s. Rice dull at from 19½ to 20 s. Sugar, coffee and tea unchanged.

P. S.—A later arrival announces a still further advance, and prices in this country have advanced from 2 to 3 cents.

## Irish Potatoes.

The following mode of planting and raising Irish Potatoes, we clip from the Christian Sun, written, as the Editor says, by one of the best and most successful raisers of this favorite esculent in Alamance County N. C.—a section where they make as fine Potatoes as can be produced any where in the world. The writer says:

I propose to give you my mode of planting, which has for several years, proved eminently successful, without a single failure.

I select a friable soil, inclined to be sandy, if convenient, if not already rich I make it moderately so, by a dressing, broad cast, of well rotted manure, the scrapings of the kitchen yard prepared, but any well rotted manure is good; prepare the ground thoroughly by repeated plowings or spadings if necessary. This done, make furrows or trenches two feet apart and four inches deep.

Then make a compost of 20 bushels wood mould or partially decomposed vegetable matter, 1 bushel No. 1 Peruvian Guano, and one bushel fine charcoal, (such as can be had about the Railroad stations, or Black Smith shops) or instead thereof, ½ bushel ground Potash, thoroughly incorporate these ingredients and spread at the bottom of the furrow at the rate of one large handful to two steps, about six feet.

Cut and drop the pottatoes in the ordinary way about nine inches apart, then fill the trench even full of earth, leaving the surface *perfectly level*, and if at diging time you are not satisfied with the yield your success will not equal mine. I have raised from this mode of culture over 400 bushels from 8 bushels of seed.

When the grass makes its appearance, I put with the hoe or plough, a sufficient quantity of earth about the plant to cover the grass, and this ends the cultivation, except to go over and pull out the large weeds.

This plan of planting is (for our latitude) founded on *common sense.*

Our climate is warm, and soil hot and dry in summer, hence, the potatoes in ridges scald and begin to rot, soon after, often before maturity; if we dig them so early they will not keep, but when the plan now described is adopted, the Guano compost hastens the growth, the ground being bare, is more easily shaded and kept cool, and the potatoes will be found sound and remain in the ground until frost, when you may dig and put them away for winter use, as well in Va. and Carolina, as in Maine or Connecticut:—Some may think their land too moist for this mode of planting; to such I would say—the Irish potatoe delights in a deep mellow moist soil, but if your ground is truly too damp for such a crop, it needs ditching, and will not grow any thing well until this is done.

CRAVEN.

---

☞ Persons sending on subscriptions for the N. C. Planter, will please state whether they have received the January number.

---

☞ Extract of a letter dated Walnut Cove, Stokes County, N. C., Feb. 9, 1858.

MESSRS. EDITORS: The first No. of the N. C. Planter was received, and I am glad to see that it comes fully up to public expectation. But there was one subject that a large portion of the State is deeply interested in, that was not touched on. The culture of Tobacco is now attracting the attention of the people in many parts of the State, where the soil suits its maturity as well as any in the world. And from what I have seen, there are large sections of the State where that crop has not been introduced, that would make the finest kind of Tobacco; and at this time there is a strong disposition in many of the people to try it, and would, but they know nothing of the management; and as it is a crop that requires a great deal of management in order to ensure success, would it not be well for you to get some practical farmers to commence with your next number of the Planter and tell the kind of soil, management, &c., necessary, in order to raise the plant, and then in each succeeding No. tell how to prepare the land for the reception of plants—how to cultivate—how to cure, &c., &c. And as it is a crop that requires about 18 months from the time you sow seed till it is ready for market, there is particular work for every season of the year, which if properly treated on, by one who has experience, it might prove valuable in the success of the Planter, and in turning the people's minds from still houses to a crop much less injurious to their energies and morals, and far more profitable and philanthropic.

Where are the Walkers, Clay, McGeehee, Terrell, Williams, and others in Person; the Slades, Blackwells, &c., of Caswell; the Chambers, Marshall, Guthry, and Leak, of Stokes? They are all fine practical planters, as well as many others that might be enumerated. Let them speak out, and it will be the surest way to stop the stills in this State. For I assure you Tobacco making and still houses neve: stay long together.

I have written you a long letter without touching the subject I had in view, when I commenced. In view of the difficulty in getting a good article of Guano, when it passes through too many hands, and the difference between the long and short ton, and the requirement of the Government Agent that we must take such a number of tons or we must buy from second hand, would it not be best for you to adopt the plan of the American Farmer, at Baltimore, viz: To act as agent for Government Agent and to furnish the Farmers of this State with any quantity they may send you the cash for, and charge 5 per ct. per ton for your trouble? I now leave the subject with you and hope the Planter may live long and be useful.

Yours, Respectfully,
BEN. BAILEY.

[Our Correspondent will find an article in this number of the Planter, written by a Virginian, on the Culture of Tobacco, which gives much of the information solicited in his letter above. We hope, however that his appeal to the producers of the weed in our own State, will be responded to, and that we shall be able to give in our next number some interesting and instructive papers on the cultivation of this profitable product of North Carolina. As it regards the Guano suggestion of our Correspondent, we may see if any such arrangement can be made.—ED. PLANTER.

---

## Fodder—Oats.

One of the most wasteful practices in regard to fodder, is the present practice of cutting and feeding oats. They are usually allowed to stand till ripe, and the stalk yellow, and then cut, threshed, and the straw, of little value, used for bedding, or litter. If oats are cut when a little green, and then well cured, the straw is the very best of fodder. Feed oats, thus cut and cured in the sheaf, to horses, and they will eat the straw in preference to hay; and a farmer saves the trouble and expense of threshing, and his oat straw is worth as much as its weight of the best of hay.

*Southern Farmer.*

# Horticulture.

**S. W. WESTBROOK, EDITOR.**

## Remarks on Orcharding.

*Continued from the January Number.*

In discussing the fourth proposition in our programme, we conceive that unless we take up the subject in all the relations that it maintains to Horticulture, that an impression will fail to be made. We must be pardoned, therefore, if we are tedious in our remarks, as we have no other motive in view but that of doing something to enhance the interests of our citizens. And as we have promised to give our readers a few thoughts upon the *mode of selecting trees for the Orchard*, of course we shall have to assail a number of frauds and errors practiced (and many times innocently) by persons engaged in tree vending and raising, and the parallel influence of hereditary disease engendered by such erroneous practices, upon inanimate, as well as animate creation. And to make the subject plain, we shall enter into the details of *tree raising*, and give our reasons for the assertions that we make, which shall coalesce with the laws of nature, and which, *we conceive, must convince* the most casual observer, if he has even a limited knowledge of vegetable physiology.

The first great error, (and the primeval error of the Southern States,) is that of obtaining sprouts from the roots of old Apple and Pear trees, to engraft upon, or to transplant for standard trees. A sprout or sucker does not emanate from the natural germ or seed, but from the root of another diseased tree, or part of a tree, which in all probability was a sucker or fungus itself, carrying with it the hereditary disposition to throw up sprouts; which disease makes its appearance in every successive generation, causing a decrease of longevity.*

And to prove this position, it is only necessary to observe the analogy existing between things animate and inanimate. Suppose, for instance, that an individual should be so unfortunate as to be diseased by a succession of portuberances or fungus excrescences about his feet and ancles, which were obliged to be amputated. Would not those successive depletions (the effect of amputation) engender a sickly habit into the system, and impair the constitution to such an extent as to result in premature death?—And is it not probable that the disease would be transmitted to his successive progeny, shortening the lives of each generation?—Now all sprouts obtained from the roots of old trees have small bulbous knots or fungi on their roots, which are infested with numerous insects or affides, which are continually probing the epidermis or outer bark of the roots with their proboscis; and in the effort of nature to heal the wounds, the aforesaid knots or bulbs are re-produced again and again, until the whole mass of roots assume a bulbous character, and become as brittle as a sweet potatoe; and the disease becomes so diffused through the system that finally the trunk and the limbs of the tree break out with warty excrescences similar to those incident to the animal system; and at certain times in the year, there are little cells in the warts, which contain very small larvæ or grubs, which hatch out a multitude of small affides, which are viviperous in their process of re-production, which is very rapid.

---

*NOTE.—Quite a number of our most inteligent Pomologists, have adopted the opinion (and not without having cause to do so,) that any one kind of fruit of a certain genera will run out in a series of years. A question now arises in the discussion of the subject on the hereditary disease of trees—does not the propagation of trees from diseased ones hasten the premature decay of such kind, propagated from diseased parents? We should like to obtain through the columns of the N. C. Planter the opinions of gentlemen that have given the subject some thought.

They are armed with a long trunk or proboscis, which is used to suck all the sap out of the leaves, entirely thwarting the economy of nature in supplying every portion of the plant with its life blood; at the same time so injuring the foliage as to destroy the lungs, the medium through which the atmospheric gases are obtained and appropriated to the use of the tree. Now how is it possible for a tree to bear fruit, when there are millions of insects preying not only upon the roots, but upon the trunk, the branches, and even upon the tender leaves, attacking the citadel of life in every direction?

In order to get clear of these pests of the Orchard, we must exclude all sprouts of every kind, and use seedlings, raised from seed obtained from thrifty young trees; for no tree is a perfect tree in all its parts, unless it is raised from the seed, which contains the natural elements in it to transmit to the tree produced through its agency all the qualifications to make it admired, viz: fruitfulness, longevity and beauty. And even after the best seedlings have been obtained for stocks, unless they are transplanted annually, a great many of them will be affected with the aphis, and the roots will soon get into the same condition that sprouts do, and render them entirely useless. Therefore it is the duty of the honest nurseryman to protect his trees from their ravages, and offer none but smooth, fibrous-rooted trees to his patrons. Then all shall have some hope of success in raising healthy orchards.

The subjoined proceedings, which we copy from the Southern Cultivator, contain our views on the subjects discussed, and we confidently recommend them to the readers of the North Carolina Planter:

At a recent meeting of the "Fruit Grower's Association of Western New York," one of the questions propounded, was

"*What age is best for planting Apple and Pear trees from Nurseries to Orchards, to insure success?*"

The members present proceeded to discuss this question as follows:

T. C. Maxwell said that when he commenced the nursery business, having no extra sized apple trees (as they were at that time in great demand,) he procured some, and they were planted in his neighborhood, with the small ones from his own nursery. The result was such as to convince himself and his customers that it was folly to plant large trees.

C. P. Bissel, of Rochester, five years since, at a good deal of trouble and expense, removed some large cherry trees to his grounds, and was so successful that he had been induced to try others, but had given it up as a bad job, and hereafter all he would seek would be a young healthy tree.

Mr. Berckmans said the French rule was, that a tree should make all its wood on the spot where it grows, and hence a tree is generally cut down to the ground after transplanting. When Mr. B. came to this country, he brought a ship load of pear trees, the best of his own and Van Mons' collections. The wood was injured on the voyage, and on transplanting he cut down to the sound wood, many to the ground. Those that were apparently uninjured were planted without much cutting; but they lingered for years and most of them finally died. Those that he cut down are now beautiful pyramids, requiring no care, and producing beautiful crops.

Mr. Fish once sold a collection of trees to a lady in Pennsylvania. While delayed at Corning, the mice got into the bundle and gnawed the bark off several of the trees, some six inches above the roots. He cut them down and made the lady a present of them. The present year, being in the neighborhood, he called to see the trees, and those that had been cut down were the finest of the lot.

Mr. Ainsworth said that when he commenced the nursery business he could not persuade people to buy his small trees. One of his neighbors went on a journey with his team in search of "fine, large" trees, and returned heavily laden with about fifty apple trees. In two years after there was hardly a tree living. He then bought small trees, and now has a fine young orchard. Nine years ago, two of his neighbors, one Mr. Wilbur, and the other being unsuccessful he would not name, determined to plant cherry trees. Mr. W. sent to Elwanger & Barrys, and bought two years old trees, planted them, and they are now as beautiful trees as man ever looked upon. The other, on seeing the trees, made up his mind that he would find better trees than that, and succeeded in finding some big ones two or three inches through. They are alive now, but little larger than when first planted. The philosophy of the thing is this: when a large tree is taken up, so many of the roots are broken off that the tree starves before new roots are formed to furnish its sustenance.

Mr. Barry was glad to hear this question discussed. No doubt thousands of trees are destroyed by being removed too large. A young tree is checked but little by removal, and soon commences its growth. It would be well to be definate in our discussions.—The question was: *What age is best?* For the Pear, Cherry and Plum, two years was old enough, *and if persons wished a model orchard, trees of one year old would be better.*

These are the opinions of some of the most intelligent and experienced Fruit Growers in America, and should be considered *conclusive.* They have more force and significance in the South than at the North, where young trees are of much slower growth. The passion for "*big trees,*" and the neglect of trees (big and little) after planting, are among the principal causes of the failures and disappointments which often attend amateur efforts at orcharding.

## Heading back, or Foreshortening.

In our warm, sunny South, all fruit trees and plants, form more luxuriant or rampant heads, than they do in a colder clime. In fact, in some trees, such as the Peach, Plum, Apricot and Nectarine, there appears to be an uncommon proneness to longate at the extremities of the vertical branches, while the latterals and inner limbs perish, to a great extent, for the want of a sufficient supply of sap. There are two prominent reasons why trees should not be permitted to grow thus. The first is, that all fruit trees should be trained low, in the Southern country, so that the branches may shade the trunk of the tree from the scorching rays of the summer's sun. And the second reason for low training is, that if a tree is permitted to grow tall, it is not strong enough to bear up a heavy crop of fruit at the extremity of its branches, which must inevitably break, or split off from the main stem; and if the limbs of the tree are not mutilated by the weight of the fruit, then the roots must give way, because the whole weight of the tree, and fruit, is acting upon them with lever power. Now, while these are *two* prominent reasons, at least, why fruit trees should not be permitted to grow tall, there are several advantages secured in low training and the foreshortening system: The first is, that the fruit grown upon such trees is much larger and more delicious and juicy than that grown upon trees that are not cut back. The second advantage secured in low training is, that the fruit can be gathered much easier and without bruising. And in the third place, if the system of foreshortening is properly carried out, a greater number of trees, by one-third, can stand on an acre of land; and the product will be much greater, and the trees will last longer than if they were permitted to grow without training or forming.

In performing the work, one-third or one-half of the new wood of the outer branches should be cut back smoothly to a leaf-bud; and the upright thrifty shoots should be pruned off to the first fork, and even lower, if necessary, to form the top of the tree into an obtuse cone. All superfluous branches or limbs should be trimmed off from the inner portions of the large limbs; but let that portion of the work be done with care; for if the larger limbs of a tree are made bare by clean pruning, they are as liable to be blighted by the rays of the sun, as the trunk of the tree when it is exposed. The Peach, Plum, Apricot and Nectarine, may be foreshortened any time between the time of defoliation and the time of blooming, but it would be better to defer any inside pruning until April, at which time the wounds will heal more expeditiously.

## The Garden.

Nothing on the farm pays as well as the garden, and yet hundreds of farmers are so negligent of their duties in this respect that their gardens are a disgrace to their homesteads. Very often we see a meagre lot fenced off, as often with rough rails and a worm as otherwise, and a stinted allowance of manure spread over it and ploughed in with a shallow furrow. As thus prepared the seeds are planted and one or two hoeings given in the summer, and then comes grumbling on part of the farmer because his garden does not produce an abundance of the finest cabbages, beets, &c. Nothing comes to perfection in such a garden except weeds, and if a market for the seed of such were opened the garden of such might be really profitable. The garden pays well only under a liberal treatment. It should be given a rich coating of manure during the winter or early in the spring, and this should be spaded in at least to the depth of the longest spade. If the garden is underdrained and trenched, so much the better,—a good and thorough spading is indispensable. A common plough will by no means go deep enough, and then it does not leave the soil in so perfectly pulverized a condition as the spade. The season is now at hand for preparing the garden, and a little extra labor performed therein will pay a good instalment in vegetables during the summer and for the coming winter. —

◆

*A New American Strawberry.*—The following notice of a new American Strawberry will be read with interest by all Strawbery raisers. If this variety maintains its high promise, it must stand at the head of market berries. The following is the account of it, from the *Horticulturist:*

"*The Marylandica Strawberry.*—One of the finest Strawberries, if not the very finest, we have ever seen and tasted, comes from Samuel Feast & Sons, of Baltimore. It is the berry that took so many premiums in the hands of the late Dr. Edmondson, who would never part with a plant. Messrs. Feast have the control of the whole stock, and we advise cultivators to look after it at once. These strawberries are entirely different from any other we know; the vines are very strong; leaves dark and glossy; many of the berries have a foot stalk from five to six inches long; fruit very large, often flattened, solid, and firm, bearing transportation remarkably well. The interior is perfectly beautiful; cutting almost as solidly as a pear, without any toughness; well colored and luscious, requiring less sugar than most. We pronounce them invaluable."

◆

*From the Southern Farmer.*

## Culture of Tobacco.

Gentlemen:—I propose to offer for your consideration a few remarks on the culture of tobacco. Taking an interest in the subject, I have determined to offer you such information as my experience will enable me to give. It is a subject that deserves our especial attention, and presents an almost unlimited field for the operations of the practical farmer. And it not only requires experienced farming, but also the most careful attention, from the time we burn our plant beds, until we dispose of the crop. Hence we may readily perceive the importance of study and close observation on the part of the farmer in order to accomplish much, or else his land, it matters not how rich in natural vigor of inherent fertility, will only yield thorns and thistles. Labor and good management are absolutely necessary to compel the soil to yield its fruits. And may thrift and plenty be the reward of our willingness to toil, as they have ever been associated with the name of America.

First, I will give you my mode of preparing my plant beds. Select a moist piece of land, have it in good order, and burn hard; let the fire remain an hour at least before moving. I then hoe the bed until well pulverized. I use Peruvian Guano at the rate of twelve hundred pounds to the acre, rake until very fine, then sow the seed (but not too thick.) After drawing out the first plants, I use a weak solution of guano and water sprinkled over the bed, and repeat it every time I draw the bed over. It will keep the plants from fading, and hasten their growth.

By the above mode I have always succeeded in raising plants.

In preparing land for tobacco I think it best to have it well broken with a double plow (six or eight inches deep) in November or December. Early in the spring as convenient, I refallow with single plows. As soon afterwards as convenient I cast out my manure and scrapings, scatter immediately, and plow over with same plows. Before making hills, I cross it with shovel plows, lay off three feet four inches, sow over one hundred and fifty pounds Peruvian Guano to the acre: then bed the land with single turning plow; lay it off the other way with the trowel hoe and mould-boards, in rows three feet apart, and make the hills. I think it best to weed down tobacco in four or five days after planting, as it keeps the hills moist, and causes the plants to take root and grow off much better. After some eight or ten days I plow four times to the row with the small trowell hoe, running close to the plant, then follow with hoes and hill it. The next working should be given in ten or twelve days: plow with the Cato plow (which has iron mould-boards) three times to the row; prime and hill as high as the plant will admit.—Should the row after this working become grassy, run one furrow (shallow with the same plow and long mould-boards,) and flat weed with the hoes, pulling all the loose dirt to the tobacco, which will give it a good hill and prevent its drowning, should there be much rain. The roots that put out from the stalk will cause it to ripen much better, and give it more weight. Forward tobacco may be topped at twelve leaves, but I prefer ten, unless very forward, believing it will yield more, and ripen better, and be less subject to spot. Let it stand in the field as long as possible without wasting. Put ten plants to the stick, and scaffold for a few days (but not to be caught in the rain.) Place the sticks eight inches apart in the barn, keep a gentle fire (of seasoned wood) under it until cured. Should there be a warm or rainy season, it is best to dry it out with small fires. Bulk it down in soft order (not too high,) and strip as early as convenient, and be particular in separating the inferior from the good. I prefer re-hanging the good tobacco, and taking it down of a warm morning in dry order. The stems should be dry enough to break. Bulk it three weeks before prizing, which should be done with care, and have it properly straightened before putting in the hogshead.

THOS. W. GOODRICH.
Tryall, Greensville Co., Va.

## For the Ladies.

### To Propagate Window Plants.

Almost all pot plants adapted for window culture, says Emery's Journal of Agriculture, are easily increased by means of cuttings and properly set about. The principal difficulty is, to counteract the dry atmosphere of the room which robs the leaves of their moisture before fresh roots can form to replace it, hence they will without some provision, wither and die. That difficulty is overcome by supplying them with an atmosphere of their own, formed by covering a small box with a pane of glass. This is in effect to furnish them with a *wardian case*, in which almost anything will grow. For example, let those who have hitherto found difficulty in striking cuttings, provide a box six inches deep, one foot long and nine inches wide, bore a few holes with a quarter inch bit in the bottom, to draw off the surplus water, and fill three inches of the box with sharp sand, placing a few pieces of broken pot over the holes to make the drainage perfect. Select pieces of the plants you wish to cultivate, from two to three inches long, cut them with a keen edged knife close under a joint, not obliquely, as is often done, but even; cut off the leaves half its length and insert into the sand, which should be pressed down, leaving about half the length of the cutting above the sand, give a good soaking of water, and place over your glass. Here then you have a propagating house, increasable in size at pleasure, that is self-regulating, or nearly so, in point of watering. as the moisture arises from the sand, condenses on the glass, falls down to re-moisten the sand again, sufficient only being required, to be added to replace that lost by evaporation through the sides of the box, and a little perhaps that escapes under the glass. Placed in a warm window, cuttings will root in from three to six weeks, according to the sort of plants, when they may be taken out and potted into small pots, forming perfect plants of their various kinds.

### Planting Peas.

As this is the season when our lady friends are planting their "green peas" and Irish potatoes, we give them the following curious experiment, which we take from the Agricultural Gazette. The writer says:

Some twelve months since I saw a letter from a farmer stating the great success that had attended an experiment the writer had made in the previous season. It consisted in inserting a pea in each potato set, and planting the potato in the usual way. The result, he stated, was a large yield of peas, and a splendid crop of potatoes; but the most important result was the entire freedom of the potatoes so treated from any disease, while all those planted in the usual way in the same field were extensively deteriorated. I was led by this statement to try the experiment on a small scale in my own garden this season. I planted not quite half-a-peck, only fifty sets, in six ranks, cutting a piece out of each, and putting a pea firmly in. The pea grew up and flourished well, and last week I dug the potatoes. They were perfectly free from the slightest taint or speck of disease, and very fine and large; while in the same bed close to them was another lot planted in the old style, nearly half of which were rotten.—*Agricultural Gazette.*

Curious but Instructive Epitaph.—In a New Jersey grave-yard there is a plain stone erected over the grave of a beautiful young lady, with only this inscription upon it: "Julia Adams, died of *thin shoes*, April 17, 1839, aged 19."

Important Invention.—J. A. Cooper, Nashville, has invented a candle mould, with which, it is said, one person can manufacture as many candles in one day as forty hands can by the old mode of manufacture. The candles light by friction, similar to wax matches, and can be packed without danger of ignition. The new moulds will not cost more than one-tenth as much as the old kind now in common use. Tallow stearine, and all kinds of candles can be made without steaming. One hand can wick a box of candles per minute. Mr. C. has taken the necessary steps to obtain a patent for his invention.

Paper Impervious to Water.—Take 24 oz. of alum, and 4 oz. of white soap, and dissolve them in 2 lbs. of water; into another vessel dissolve 2 oz. of gum arabic, and 6 oz. of glue in the same quantity of water as the former, and add the two solutions together, which is now to be kept warm, and the paper intended to be made water-proof dipped into it, passed between rollers and dried; or without the use of rollers, the paper may be suspended until it is perfectly dipped, and then dried. The alum, soap, glue, and gum form a kind of artificial leather, which protects the surface of the paper from the action of the water, and also renders it somewhat fire-proof. This is a preparation for water-proofing paper intended for packages exposed to the weather, recommended by Professor Muschamp, of Wertemburgh, Germany.

A Water proof Mixture for Leather.—Take one pint of tanner's oil, half a pound of tallow, a lump of rosin the size of a common shell-bark, Burgundy pitch, size of a hen's egg, lamp black, three cents worth—mix together, and melt gradually over a slow fire. When to be applied, the mixture should be about milk-warm, and put on with a clean sponge.—The leather may be made a little damp not wet. The above cement, when applied to boots and shoes, will effectually prevent their soaking water, and keep the leather pliant, and the feet of the wearer warm and dry.

◆

## RECEIPTS FOR THE PLANTER.

$1 each from the following persons, viz: J. J. Freeman, Pacific; Rev. S. Frontis, Iredell; Robt. Henderson, Jr., Hopewell; W. H. Jones, Haywood; P. S. Rogers, Wake; Henry Best, Snow Hill; E. C. Stewart, Coburn's Store; W. S Stewart, J. M. Hutchison, Charlotte; Jacob Ramsour, Lincolnton; H. J. Davis, Warrenton; Benj. Oliver, Mt. Olive; D. B. Murphy, G. W. Lawrence, Mary's Garden; Hon. Chas. Manly, Raleigh; C. W. Graham, A. Southerland, Dr. J. H. Faison, Kenansville; Wm. Payior, Jr., Leasburg; G. B. Lea, Pleasant Grove; T. H. Selby, Raleigh; George Kilpatrick, Hookerton; David A. Gibbs, Middleton; R. H. Page, Raleigh; Thomas Settle, Wentworth; Joseph P. Smith, Wadesboro'; Rev. W. B. Jones, Clayton; W. E. Spruill, Hamilton; John A. Nicholson, Bostick's Mills; Henry G. Scott, Person; Chambers & Bailey, Walnut Cove; J. M. Smith, Fayetteville; $12 from Dr. J. F. E. Hardy, for a club at Asheville; Rev. J. Buxton, Asheville; Joseph Small, J. J. Taylor, I. H. Clegg, N. Clegg, E. D. Ausley, B. H. Jones, Thos, Ragland, R. S. Marks, W. J. Sloan, J. B. West, J. A. McDonald, Brooks Harris, T. M. Mann, Chatham; W. J. Long, Randolph; W. G. Merritt, A. J. Rigsbee, Chapel Hill; Hon. J. T. Morehead, Greensboro'; J. Busbee, Auburn; Wm. Boylan, Raleigh; S. P. Phillips, Clayton; W. A. Rogers, Robeson; C. J. Wheeler, Guilford; W. J. Temple, Kempsville, Va.; N. D. Edwards, Hookerton; J. W. Johnson, R. D. Wimberley, W. F. Lewis, Tawboro'; Maj. Ashley Sanders, Smithfield; J C Mallard, Kenansville; James Wilson, Elizabeth Town; D L Burgess, Augustus Latham, J Q Adams, Daniel Latham, Beaufort co.; Owen Holmes, Thomas Hansley, Topsail Sound; S J Berry, Wilmington; Dr J W Davis, Goldsboro'; W Murdock, Salisbury; L Vinson, Robert Brinkley, Brinkleyville; J S Durham, Bladen; A D McLean, Robeson; Azariah Graves, Caswell; J H Tyler, Dr H S Williams, Palmyra; O G Foard, Rowan Mills; Thomas Hallyburton, Dysartsville; E L Miller, Long Creek; L L Polk, Wadesboro'; M L Wiggins, Ringwood; H G Spruill, Plymouth; J R Hitchins, Pekin; L H Bogie, E Jacobs, Jackson; A Brown, Killian's Mills; J R Parker, Newby's Bridge; W S Grandy, J B Ferebee, Camden; S H Whitaker, Wake.

*Per T J Lemay*, late editor of the Arator, the following amounts for the annexed names: $1 50 J S Dancy, Tawboro'; 50 cents R Trawick, Wake; $1 Needham Price, Wake; $1 J W Harris, Wake; $1 B & A T Woodall, Johnston; $1 50 Rippon Ward, Pactolus; $1 50 T H Williams, Long Creek; 1 N N Nixon, 1 J M Foy, New Hanover.

**" THE SPIRIT OF THE AGE,"**

**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance*.

**100.000**

**CHOICE FRUIT TREES FOR SALE,**

**BY WESTBROOK & CO.,**

AT THE

**West Green Nurseries and Gardens,**

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

**30 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | [illegible] |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

Col. Wm A. Lenoir

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., MARCH, 1858. NO. 3.

**THE NORTH CAROLINA PLANTER,**

Is published monthly, in Raleigh, N. C., at ONE DOLLAR A YEAR, ☞ *payable invariably in advance.* ☜ From this rule there will be no deviation.

No copy will be sent unless the cash accompanies the order; and it will be promptly discontinued at the close of the subscription year, unless the money is forwarded for renewal.

Gentlemen of ability and experience will conduct the PLANTER. All communications to be addressed to A. M. GORMAN, Publisher.
Raleigh, N. C.

### Correspondence of the N. C. Planter.

FRANKLIN, Macon County, N. C.,
February, 1858.

A. M. GORMAN, ESQ.: I respond to your request, and will most cheerfully render you any aid of which I am capable, in getting under way an Agricultural journal designed for the special benefit of the farming interests of our own State. We of the Western section have special need of information, and something to arouse us to enterprise and a better system of tillage. If your Journal can accomplish this throughout the State, it will be a great benefit to the character and interests of the good old commonwealth. I shall write occasionally, more for information which I may solicit from others, than with a hope of imparting profitable information to others.

One thing I have long desired to see observed in our Agricultural periodicals—a statement in connection with experiments in the application of fertilizers, of the Geological character of the soils experimented upon.—I am satisfied in my own mind, that such a course will suggest many practical hints to farmers in different sections of the State, and render the results of their experiments much more appreciable and intelligible. We have in North Carolina every variety of soil, from the salt marsh upon the sea board, to the highest elevation of soil made principally from the decomposition of granitic and other rocks. We may therefore, reasonably expect different elements in the different soils—especially in the muck and alluvial deposits of the eastern section of our

State, and those forming much of the low lands along our mountain streams. Here solutions from decomposed metalic sulphurets are constantly percolating through all our mucky lands. This fact may suggest a different treatment in some respects of these different mucks and alluvial deposits.—There are many facts connected with this subject which I might mention, as suggestive of the elements to be used in forming compost manures for different soils. I regard Agriculture as chemical philosophy reduced to practical operations and practical results. The elements which enter into the structure of vegetable products must be present in the soil, in proper proportions, if we would expect the growing crop to have a vigorous developement and perfect maturity.—We are not authorized to expect a per centage of lime, and magnesia, and potash in a corn stock, if these elements be wholly absent from the soil in which it grows, any more than we are authorized to expect an operator in a laboratory to produce phosphate of lime, if neither lime nor phosphoric acid be present in the operation. I have thrown out the foregoing hints with an ardent hope of eliciting information from your correspondents. These hints are designed to impress all your readers with the importance of observing the geological character of their respective soils.—You shall hear from me again, in, perhaps, a more practical manner.

Yours truly, C. D. SMITH.

---

**Lice on Calves**—The best resort I have ever found to rid my calves of lice, is very simple, easy, and only this: take a few dry ashes from the stove; rub them well into the hair of the animals, and all those troublesome little creatures will soon become harmless and disappear. Calves, or any other animals to which ashes are applied, should be kept dry for a few days.—*Country Gentleman.*

Iredell County, N. C.,
*February* 8, 1858.

Mr. Bruner:

According to promise, I will now give you a history of my experience with the Chinese Sugar Cane. The lot on which I grew the cane did not quite contain an acre, was very rich in vegetable mould, and supposed to be capable of producing 40 or 50 bushels of corn.

In the month of May, had the ground well broken with a one horse plow, then, about the time of planting, had it well harrowed with a heavy three horse harrow; then, on the 6th of June, drew furrows 3½ feet apart and planted the seed in the furrow, every 2 feet, dropping 4 or 5 seed in a place, covered them about half an inch deep. In about eight or ten days after the seed came up, hoed it once, and in about ten days more, hoed it again; then, in about twelve or fifteen days, plowed and hoed it, which was all the cultivation I considered necessary. The cane grew very tall, and had a beautiful appearance.

Not being able to get a mill sooner, I did not commence making syrup until the 15th of Oct. My mill was manufactured in Augusta, Georgia, with upright iron rollers arranged in a strong iron frame—the lever was about 10 feet long, and the frame on which the mill stood, was between two and three feet high. The mill was capable of expressing about 310 gallons of juice in twelve hours when regularly supplied with cane. I counted ten cane and passed them once between the rollers and obtained one gallon and nearly one quart of juice. On the 20th, the mill broke—got a new shaft put in, and began again on the 24th, and finished on the 29th--making in all about 200 gallons of syrup of the first quality.

In boiling, being very late in the season, I had the experience of those who worked earlier. The cane stood the frost of the first of October. It killed the leaves or blades, but did not injure the cane.

Some inferior cane which I did not use in making syrup, were fed to my milk cattle, and I consider it superior to corn for that purpose.

I have a quantity of seed on hand; those who want can call and get.

ROBERT RAMSAY.

### The Iron Ore, &c., of Stokes County.

A friend has sent us a handbill containing the act of incorporation of the "Stokes Iron Mining Company," with particular accounts of that Mineral Region, by Professors G. J. Phillips, E. Emmons, Jr., and E. Emmons, Sr.—From all these papers we learn that this Mineral region is one of the most interesting in the State, abounding as the State does in all the valuable ores, &c. The iron ore is of the magnetic species, yielding about 77 per cent. of metallic iron, lying on the Dan river, about a mile from Danbury, the county town. It extends over a space of about 6 miles long by 2 to 3 miles wide; has been worked for fifty years, and there are two forges in operation, manufacturing bar iron, which commands a high market price, and is in great demand. Its quality is similar to that of the King's Mountain and Lincoln county ore, (of which these ore banks are an extension,) possessing great toughness and malleability, and easy to reduce.

Besides iron, there is found in the vicinity, coal, copper, lead, gold and silver, brimstone, the finest white sand stone, suitable for making glass, marble; and last, but not least, valuable chalybeate springs, situated in a beautiful mountainous region, which only needs means of access to become a second Saratoga. There is ample water power, timber, and wood.

The coal, which is semi-bituminous, running into anthracite, crops out for thirty miles, (from Germanton to Leaksville,) along the route of the projected rail road from High Point via Salem to Lynchburg, Va.

Were this rail road built, and there seems great reason to believe that it will be, it would open all this rich region to improvement. Its iron and coal would soon find their way to market, whilst the abundance of lime from the Stokes county kilns would be delivered in the middle and eastern counties at 10 to 20 cents a bushel, to improve the agriculture of those counties.

We look, as the people of Stokes do, to the connection of all that rich section with this place, by means of our Western Road, extended to High Point, or some other pace on the N. C. Road, and the building of the projected road from High Point into Virginia. No one can estimate the change which such roads would work in favor of this place and of the whole line of country through which they would run. Let us all work, without ceasing, to accomplish such great results.

### Mecklenburg Agricultural Society.

An adjourned meeting of the Mecklenburg Agricultural Society was held on Saturday, the 6th inst. A. B. Davidson, Esq., President, called the society to order, and returned his thanks for the honor conferred in choosing him President.

The Treasurer reported that he had received $1022 32, and had expended $923 47, leaving a balance on hand of $78 47, which is not sufficient to meet the present liabilities. E. Nye Hutchison and J. M. Hutchison were appointed a committee to audit the Treasurer's accounts.

The executive committee reported the items for which money had been expended in improving the Fair Grounds.

The Secretary and Treasurer were requested to draw from the State Treasury the $50 to which the Society is entitled.

On motion of W. F. Phifer, it was resolved that hereafter all premiums be forfeited unless called for within ninety days from the time the awards are made.

The committee to solicit a subscription from the town was continued, viz: W. F. Phifer, J. A. Young and Wm. Johnston.

On motion of Dr. Strong, the Executive committee were instructed to appoint an Agent to canvass the county and collect funds for defraying the expenses of the Society.

On motion of C. T. Alexander, it was ordered that a meeting be held on the night of the first day of the annual Exhibition, and that an orator be selected for the occasion.

On motion of Col. J. M. Potts, resolved, that the Executive committee be instructed to offer a special premium for the best pair of North Carolina raised horses; also for the best saddle horse and for the best single harness horse.

H. LaF. Alexander, J. M. Hutchison, L. J. Grier and J. L. Morehead were appointed a committee to revise the constitution and bye laws of the society.

The following gentlemen were elected an Executive Committee for the present year: W. F. Phifer, J. M. Strong, B. W. Alexander, Williamson Wallace, Wm. Johnston, Jas. H. Davis and J. M. Hutchison. This committee is requested to meet on Saturday of April Court for the purpose of preparing a premium list, &c.

*Charlotte Democrat.*

*From the Cotton Planter and Soil.*

## Planting and Cultivation of Corn.

Dr. Cloud—*Dear Sir:* As the time for planting is at hand, my thoughts naturally run in that direction, and I have concluded therefore, to give you a short article on the subject.

Planters all agree, so far as I know, as to deep plowing and thorough preparation preparatory to planting corn, but differ very widely as to the mode of culture. This difference of opinion grows out of the fact, that we all pursue the old beaten track, cultivating our corn every year just alike, scarcely ever testing the different modes by experimenting, and generally, with seasons, make full crops, and we are satisfied with the result—believe that our plan is equal, if not superior to that of our neighbors. This is all wrong. No man should be satisfied with anything less than all the corn that his land and seasons are capable of making. I venture to say that there is not more than one acre out of every hundred in the South, that yields as much of any thing that is planted on it, as it is capable of doing. The planter who has in more corn and cotton to the hand than he can make yield every grain of corn and every lock of cotton that the land can produce, is overcropped, I dont care if he has not more than twelve acres to the hand. These are stern facts, that everybody must admit.

But it is impossible to arrive at the best mode of corn culture without experimenting. We must try different plans the same year, and note particularly the seasons and the result.—And one year won't settle the question satisfactorily. If you should plant one hundred acres in corn this year, and make an average of forty bushels per acre, that won't prove that by different management you might not have made fifty bushels per acre.

But if you prepare one hundred acres thoroughly, and plant fifty of it in the water furrow after bedding and throwing two furrows back, and cultivate shallow, and make sixty bushels per acre, and the other fifty you plant in the same way and cultivate deeply, and make forty bushels per acre, of course you have demonstrated the fact that shallow culture, after preparing well, is preferable to deep culture.—This experiment would pay. You would not be satisfied with the forty bushels per acre, because you see that your land can produce sixty. But if you had planted the whole huudred acres alike, and cultivated in the same way, and made forty bushels, you would have thought that you had made a good crop, and perhaps would conclude to practice that system forever, with the fact hid from your eyes, that you were every year losing twenty bushels of corn per acre.

My opinion, after ten years experience in corn culture, during which time I have experimented no little, is that corn land should be plowed deeply and thoroughly, and corn planted shallow, about even with the general sub-soil of the field. And after it is well up, plow it as deep and close with small plows as can be done with one horse plows, and after this cultivate lightly, "laying by" as early as possible—say by the first of June.

I am aware that some of your correspondents will object to plowing corn deep at all; and I am also aware that the objection cannot be sustained.

G. D. Harmon.

Utica, Miss., Feb. 6, 1858.

*From the Southern Farmer.*

## Correspondence.

Messrs. Editors: If my letters are anything worth, I perhaps should apologise for the length of interval between them. If on the contrary they, like a good many others that appear in print, are published more "to fill up" than for any intrinsic merit they possess, you owe me thanks for my long silence. I propose that we compromise on "half and half" principle, and say no more about it.

Farmers have housed their crops, and every thing comes in well except cotton and pork. The former, as you know, falls short about half, and the cotton perhaps "more so;" and what is a little more strange in connection with this subject is that pork's up, while cotton's down. I say "down," but I mean the farmers think so; for although, when a few years ago it was six and eight cents they thought they were doing remarkably well, and if they got a quarter or a half over, it was something to brag on, they do not now consider eleven enough, and if it were to get to 37½, many of them would hold for forty. Pork has been very scarce and high. I notice it has been offered freely in Petersburg at eight cents. The price here has been eight and a half cents. Corn is abundant, and the ruling price here now is fifty-two-and-a-half to 55 cents per bushel.

There is a disposition among our farmers to go more extensively into the culture of cotton, and much more will be planted in this region the present year than has ever been heretofore. Wheat, having gotten down to $1.00 a $1.25, is in a great measure abandoned by those who under the influence of the high prices the past three or four years had commenced producing it, though in the upper counties th farmers still go into it as strong as ever.

I have lately learned one thing with regard to wheat bran or "shorts," which may not be uninteresting to your readers. It is about the best food for hogs that can be given them. I killed this winter about twenty of the finest hogs I have seen anywhere, and throughout the entire summer and part of the fall fed them on nothing but shorts. They were in good order all the time, but in October or November I put them up and changed the food to shipstuff, and just before I killed gave them a little corn. No one killed fatter hogs anywhere, and the lard made from them was very abundant. Mr. Paschal Thomas, of Greenville, Va.; first called my attention to the fact of the rapid growth of pigs on this food, and upon a fair trial I am sure I never saw anything equal it. Whether it enables the sow to afford more nourishment, or being soft and fine may be more readily digested by the pigs than other food, I cannot undertake to say, but certain it is, they keep in better order, grow faster than on any other food I ever tried, and they always have the appearance of improved stock. Hon. M. W. Ransom, after becoming satisfied of this, has determined to try it on his farm.

Messrs. R. R. Bridgers, Jno L. Bridgers and B. B. Barron, three of the most intelligent and enterprising farmers of Edgecombe county, use shorts largely on their farms, and so does Col. N. M. Long of this county.

In addition to this, I heard Mr. Wm. H. Walker of Greensville, county, Va., say he had used shorts as a fertilizer, and believed that to be better in a corn hill than Guano. This is something entirely new, and if they go into general use for this purpose, will prove of inestimable value to the farming interests, as Guano is too high to be profitable.

Perhaps some of your readers may wish to correspond with Mr. Walker on this subject, and I will state that his post office is Hicksford, Va.

I could give you a hint also on the value of shipstuff, but as this letter is already too long I wlll wait till some other time.

OLD NORTH STATE.

Halifax, ct'y, N. C., Jan. 29, 1858.

### Wheat raising in South Carolina.

*To the Editors of the American Farmer:*

GENTLEMEN :–I have just come back to my office, from the country, where I have been five weeks on my little farm, breathing the pure air, sowing my turnips and getting ready for my wheat crop. My land is well suited to grain, but not for cotton. In nine crops of wheat I have made only one bad one, and when that bad crop was put in I was not at home, and the man who was managing for me didn't take the American Farmer, or believe in book farming. And for eight years I have bought meat only for a portion of my supply for one year, and my hogs have been wintered mostly on turnips—and I have had one excellent clover lot, and I am preparing to put in a much larger one. I do not make these remarks in the spirit of boasting, but to show from facts that the people of the South, who devote so much time, and labor and capital to cotton, might raise their own provisions, and making the cotton crop their money crop, have as a clear profit what they get for their cotton.

Our wheat crops, which as you are aware, are limited, are good in South Carolina. Our corn and cotton crops will not be an average crop, owing to the very dry weather which has prevailed in many portions of our State.

S. R. B.

Columbia, S. C. Sept. 15, 1857.

*From the Cotton Planter and Soil.*

## Short Letters to Overseers.—No. 1.

Dr. Cloud—*Dear Sir*: Few positions in life are more responsible than that of an overseer on a Southern plantation, and it is to be feared that many persons undertake it without being aware of its responsibilities. You will therefore not think it amiss, if I preface what I have to say with a few remarks upon the nature of the vocation in which you are engaged. An overseer is the equal of his employer; he is his confidential agent. He is entrusted with the care of his employer's estate, and upon the fidelity with which he discharges that trust, in a very large degree must depend the prosperity of that estate. You are just as responsible as the head clerk to whom the merchant would entrust the management of his mercantile affairs; or the superintendant to whom the capitalist would confide a manufacturing establishment, or the teacher to whom a parent would commit the education of his children. The nature of the trust is precisely the same in your case that it is in either of the other instances, though the duties which you may have to perform are different. Nor is your trust less complex than that of either of the other agents to which I have refered. The management of a Southern plantation involves faithful attention to a great variety of details. From the proper treatment of slaves which are placed under you, down to the most trifling matter on the plantation, are a thouand interests demanding your attention, and if you are unfaithful in any of these particulars, the interests of your employer must suffer somewhat. You have in your hands not only the result of the crop, and to that extent, the annual income of your employer, bu tthe health and lives of the negroes, the care of the live stock and the farming utensils, are all, in a great measure, entrusted to your keeping, and thus you control not only the annual income, but the active investment of your employer. With all these interests in your hands, you perceive that you are entrusted not only with the estate, but very largely with the peace of mind and consequent happiness of those who employ you. Surely, then, yours is a responsible office, and it would be well if you should impress upon your mind a sense of this responsibility. Every principle of honesty and fair dealing requires that you should not carelessly undertake the duties of a relation which involves so much of responsibility. So necessary do I regard, that you should fully appreciate the importance of this thought, that I will not divide your attention by introducing any other thought in this letter. You will hear from me again next month.

Justus.

## A New Cotton in Texas.

We have received from Dr. D. C. Sharpe, of Cherokee county, Texas, a specimen of cotton grown by him from seed brought from Nicaragua, near Leon, in the mountains. It is the third year's production, on land lying near the 32d paralell of latitude, in a prairie country, the soil of which is sandy and saline, crystals of salt, saltpetre and alum naturally formed on its surface. The stalk and bolls of this cotton, Dr. Sharpe informs us, are about as large as those of the

Petty Gulf cotton; the seeds are much smaller, black and smooth, as a consequence of which 1000 pound of it unginned yields 500 pounds of ginned cotton. But it is the lint of this cotton that is most noteworthy and remarkable. For fineness and silkiness, as well as tenacity of fibre and tenuity of thread, we never saw it surpassed, if at all equaled. These qualities have led some to believe it the Sea Island cotton; but Dr. Sharpe is convinced that it is not, since it differs from that cotton in many material respects, whatever may be the correspondence between their respective staples.—For instance, he says that 250 pounds of this cotton can be picked by one hand in a day, whereas of the Sea Island not more than 30 pounds can be picked. He believes that it can be successfully grown in nearly every part of Texas. If so, it may go as a great element of agricultural era in that magnificent State.—*New Orleans Delta.*

## What the South most Needs.

It requires no uncommon sagacity to discover that the wealth and strength of the South lie in its agricultural resources. So far as these remain in a state of nature, or are developed in a way seriously to impair the productiveness of the land cultivated, the public either gains nothing therefrom, or reaps benefits of the most ephemeral character. A plain statement of the facts will set this matter in a clear light before the reader.

1st. The Southern States contain over six hundred million acres of land, which, for agricultural purposes, is not surpassed, and probably not equaled, all things considered, by any other equal area on the habitable globe.

2d. All the enclosed land in the South, according to the census of 1850, is forty-five million three hundred and eighty-four thousand seven hundred and six acres, or less than one acre in ten.

3d. Experience has abundantly proved that negro labor, as employed in the planting States, is best adapted to the production of those tropical and semi-tropical plants which are the staple crops of the South.

4th. Experience has also shown that we cannot rely on immigrants from Europe to supply labor for the cultivation of cotton, rice and sugar in this country.

5th. In consequence of the supply of laborers from Africa having been wholly cut off since 1808, and the great demand for negro labor in all cotton, sugar and rice-growing districts, with the unavoidable high price of slaves, planters have been placed in that unnatural and unwise position which renders it more profitable to to wear out the very cheap lands of the sunny South, than to maintain their virgin fertility. Had labor, during the last fifty years, been approximately as cheap as farming lands, or were slaves now as cheap as plantations, they could be bought at prices that would enable every enterprising man to improve his soil, and thus soon double the wealth and every kind of business connected therewith, in the slaveholding States. At the present perfectly abnormal, not to say extravagant price of good field hands, no one can afford to use slave labor for the production of manure, unless it be in purely exceptional cases. As a system of planting applicable to all cotton and corn fields, ours is emphatically in a false position.

No thoughtful, intelligent man can survey the old fields from the Chesapeake to the Mississippi, and not bear witness to the fact that there is something fundamentally wrong in Southern agriculture. To right this wrong is what the South most needs, and it can never enjoy lasting prosperity until its citizens have the good sense to find out wherein the wrong lies, and remove it.

The wise and good men who framed the Federal Constitution did not, could not, foresee the importance that was soon to attach to cotton culture in a part of the United States; nor how indispensable more laborers from Africa would become in the course of time, to meet the growing wants of the civilized world, in reference to our present great agricultural and commercial staple. Could they have looked into the unknown future, and in place of prohibiting the importation of slaves after the lapse of twenty years from the adoption of the Constitution, provided for the suppression of all the cruelties of "the middle passage," and given to this class of immigrants into the New World, every needful protection that good laws rigidly enforced can afford, the South would to-day be worth three times more than it is. Land and labor would then have borne relative prices, based on equal availability and sound agricultural economy; so that the soil, rapidly appreciating in value, because of the abundance of labor to improve it, would have been too useful to society to permit its destruction. Now, the great misfortune lies in the fact that Southern public sentiment fails to see, as the people equally fail to feel the popular error of consuming the natural fruitfulness of the fields which both feed and clothe them.

Without laborers to cultivate and improve the indefinite millions of acres of impoverished lands, our present practice of skinning and bleeding the soil will not be abandoned for many years. The public interest demands more laborers in the planting States; and this interest should be respected by all parties. The highest statistical authorities at the North estimate each able-bodied adult immigrant from Europe into the free States, as worth one thousand dollars to the public there. At this rate, two hundred thousand immigrants a year, give the North, every twelve months, two hundred million dollars worth of imported laborers. Will the planters and business men of the South fold their arms in idleness, and say that the large area of farming lands in this quarter of a common confederacy, shall have no benefit whatever from the introduction of human muscles from abroad?

## Culture of the Melon.

There is no fruit that enters so largely into the daily consumption of our people as the melon, and none that seems to be so little understood, or appreciated in its culture. A fine flavored water or musk melon should not be planted within one hundred yards of any other melon, or any of the melon family. Gourds, squashes or cucumbers should never be planted in the same garden, or field, with melons, for the volatile nature of the pollen of each will mix, making hybrids of the next generation, giving the melon a gourdy, squashy flavor, and softening the shell of the gourd. The melon delights in a sandy soil, and to have them in their greatest perfection, the ground should be deeply spaded or sub-soil plowed. The hills should be about ten feet apart.—The watermelon vine is very subject to injury from water; heavy and long continued rains give the vine the appearance of having been scalded, hence the necessity of planting on hills instead of on a level. Holes should be excavated and filled in with well rotted manure, with a mound made over the manure at least twelve inches higher in the centre than on the outside; on the centre of this mound, plant the seed, plant some six or eight, and when they have four leaves, thin out to three plants in a hill. As the vines begin to run, branch and bloom, pinch out the terminal bud, which will throw the whole vigor of the vine into the young fruit just set; as the fruit increases in size, take off all but one to a branch, and allow but one melon to ripen on one branch vine.

An overloaded melon vine will produce but inferior fruit. The cultivator should bear it in mind that the roots of melons run just as fast and far as the vine extends, and that the practice of laying back the vines over the hills, and plowing deeply between the hills is very injurious to the crop. The melon ground cannot be broken too deep before the vines begin to run, but it is a positive injury to the vine for the plow to go three inches below the surface, over which the vine has already run. Great care should be taken in handling the vines when working among them with the hoe. For every tendril broken or bruised on the vine, the fruit is retarded in its maturity. Keep the ground clean around the vines, and as fast as the vine elongates a branch, peg it down, so that the wind may not blow them about and break them. If the striped bug is troublesome, mix one portion of guano to two of gypsum, and dust over the vine when the dew is on—the bugs will quickly depart.

The first melons that set on the vine will mature in four weeks from the time of the setting. The second settings in about three weeks. As the season advances, they will mature in less time than three weeks. Fine crops of melons are made by using brush for the vines to run on, and cling to. The seed of the first melon that ripens should be saved for next season's planting, provided it grew where no other member of the melon family could impregnate it.

*From the Cotton Planter and Soil.*

## Planting Cotton Seed.

*Dear Sir*:—Your remarks as to planting cotton, in 258th page, I read with much interest, and hope the enquiry of H. W. H., and the response will be the beginning of better things.

As I have been so simple as to leave a beaten track and to try various experiments, I hope I will not be deemed as an intruder, or to attempt taking any wind out of your sails, by giving what I know from absolute trial and from repeated trials.

Using "two and a half and three bushels per acre, of cotton seed" will not come up to the mark if weighed or measured, in a majority of instances. I know some to use over five bushels.

I have planted an entire crop with a measured half bushel per acre, and done it for years, having seed to give away, even then; I have never planted a crop myself to average over one bushel, and know it. I have had two or three bushels planted by an overseer and then complained because I had "new fangled notions." I have dropped a single seed, two seed, three seed, and the stand nearly perfect.

Usually I take more pains in ploughing and in bedding up than any one I know of, and have "step dropped" entire crops.—When I plant the early crop, say from the 25th March to the 5th of April, I hardly hide the seed, indeed I prefer to press them into the earth, not cover at all.

If seed are ginned out from lint before bulking cotton, then sun them until perfectly dry, scatter them in a house until quite cool before banking, they will be as certain to vegetate as corn, and if dropped "four to eight in a hill," the plant stands the cold better, becomes stouter in the stalk and is every way healthier and more able to resist any disease. A hoe hand, if beds are well and nicely thrown up, can scrape nearly double, more than making up any time "lost" in planting; many seasons, the plant can be earthed with a plough and the ridge not sided with scraper or plough until the second working, hoes to follow to thin out and draw the earth more regular to and around the young plant. I know not how many acres can be planted with a bushel of sound seed, but I know I did plant nine acres with two bushels of the "Jethro" seed when they were new and scarce, and secured a good stand.

Half bushel per acre allows ten to fifteen seed per hill, more than double that should be in any hill. Suppose we were to save, say one hundred and fifty bushels for a three hundred acre crop, they could be cured in the shade, put away nicely, and before planting, rolled thoroughly so as to drop singly. Having tried the following, I do faithfully recommend: Take stable manure free from straw, put into a barrel about half full, then fill with water, ten or fifteen days before planting; wet the seed thoroughly with this mixture, stirring often; the manure being rotted; the water with a thick scum and bubbles on the top. Roll the seed thoroughly and dry off with plenty of Gypsum Plaster. Then they are easy to drop, being readily seen from the whiteness.

In 1844, I had twelve acres thus dropped and the yield was over two hundred pounds per acre over adjacent land. Say not that manure and sulphate lime caused the gain, but I never could attribute it to anything else.

Last year I used Randall's drill, planting two hundred and twenty acres; balance of crop planted as usual—sixty acres; planted up—freezed out—one hundred and sixty is now to show against the balance for perfection in stand. The planter, using of ordinary seed about one bushel of the McBride seed, being the smallest, and more black seed than of any other variety requiring about half a bushel. If more pains were taken in the planting, we could dispense with half of the hoe work and thus cultivate more and better with the plow. *We must use the plow more and the hoe less.* The demand for cotton and slave labor is too costly—we must use the rude and good implement.

Yours, truly,

M. W. Philips.

## Report of John T. McAfee on the Yield of his Corn Crop.

The undersigned begs leave to report to the State Agricultural Society of So. Ca., a crop of fifty acres of corn, grown on bottom land on Little Sandy River in Chester District. The variety of corn planted is what is called with us the Walker corn, and has been cultivated by Messrs. Walker living within three miles of Chester Court House for over forty years. The first 5 acres measured, yielding on an average 78 bushels per acre. Twenty-nine acres, including the five measured, sixty-one bushels per acre; and the fifty acres, including the above, measured fifty bushels per acre, or two thousand five hundred bushels in all. There were but three acres of the above manured, and that was with cotton seed; the cotton seed was put on the corn when first planted.

I beg also to report two acres bottom land on the same river; one acre measured one hundred and five bushels, the other acre ninety-five bushels, making two hundred bushels in all, no manure used; planted with the same kind of corn as the above.

The land was broken up with long narrow grabs—distance between rows in best land, three feet: in land not so rich, three feet six inches; all planted in drill, and when brought to stand, 18 inches apart. Commence planting 20th March; when the corn is well up, run around with narrow grabs, close and very deep, followed in a few days and chopped out in 10 or 12 days, returned, and with straight shovel, edged first furrow; in 12 days returned, and put one furrow with large straight shovel in the middle; in 15 days put four furrows to a row, followed with hoes and brought to a stand; in about two weeks, broke out middles, and laid by about the last of June.

My whole crop, 130 acres, averaged 34¾ bushels to the acre. The crop was not cultivated with the expectation of reporting it to the Society, or I should have been more particular in the exact days it was worked. There is one bushel of the kind of corn I plant, and 35 ears, on exhibition.

Respectfully, yours,

JOHN T. MCAFEE.

Sworn to before Giles J. Patterson, Mag.

*From the Southern Farmer.*

## Hen Manure.

### HOME MADE MANURE.

I found the following in, I think, the Southern Planter and placed it in my receipt book:

Hen manure, 3 bushels;
Slacked lime, 2 "
Plaster, 1 "
Salt, 4 quarts.

Mix and let it lay 2 or 3 weeks, and use it as you would Guano.

If the above should prove equally valuable with Guano as a fertilizer, then my hens have paid me well for all they have eaten, and I have had the eggs and chickens to boot.

I have saved dry, about 18 bushels of hen manure the past year, by having it put in barrels and set under shelter: and with the addition of 2 bushels of marl, which I shall use instead of lime, 1 bushel of plaster, and 1 gallon of salt to each 3 bushels of hen manure, I shall have 36 bushels of A No. 1 manure, whether you call it Guano or not. This, at 70 lbs. to the bushel, which I think will be about the weight, will yield me 25-20 lbs, or one ton and a quarter of the fertilizer, which, at $50 instead of $67 per ton, is equal to $62 50 as its value. This pays for what my hens eat.

But says one, how much trouble is it?—Very little if your fowls roost under a shelter, and you have a few old barrels. Once a week you scrape it up and put it in the barrels under a shed or in any dry place, and in the spring, about 1st March, make your compost as above described on a plank floor, if you can, but if not convenient to do this, make it in any dry place. Sow it broadcast 200 lbs. to the acre, or put about a gill to each hill of corn, not however in contact with the seed, but spread about in the hill, and I believe the result will be all or more than you expect.

JAMES. E. WATSON.

Petersburg, Feb. 13, 1858.

*From the Vermont Stock Journal.*

## To Break Vicious Horses to Ride.

CORNWALL, Vt., Dec. 1857.

D. C. LINSLEY, Esq.:—Permit me to give you my experience in breaking a vicious horse to ride. In my younger days I was importuned by a friend to take a seven years old mare to break to ride, which several had tried to do but had failed, as she had thrown every one who had mounted her. I consented to give her a trial. Before mounting I took a stout cord and passed it around her body just back of her fore legs, drawing it pretty snug and making it fast. I then put a cord in like manner around her neck, and tied the cords together between her fore legs, and also on her withers. The coupling of the cords on the withers makes an excellent place to hold on to with one hand, and very much assists the rider to retain his seat.—Thus equipped I mounted her. She made two or three attempts to part company with me, but not succeeding, gave up completely subdued. The philosophy of the thing is this: no animal can exert itself in rearing and pitching without expanding the body, which causes the cords to cut into the flesh, and hurt so bad that they will not, generally, make more than two or three trials before they give it up. ABRAM FOOT.

*From the Germantown Telegraph.*

## An Old Farmer's Experience;

### OR, HOW TO MAKE A POOR FARM RICH, WITHOUT MUCH MONEY EXPENDED.

### THE ACCUMULATION OF MANURE.

If writers on agriculture would devise and lay down more feasible plans of operation, there would be rather more chance for their works to be beneficial to farmers. They direct us to put on manure by the ton, cord or load, as the case may be; to put it on in the spring, in the summer and the fall; to top-dress and under-dress, and to always be ready to put on manure when the ground is plowed or to be plowed. Now, all this is very fine in theory, but practical farmers know very well that manure does not fall from the clouds like snow or rain; nor is it to be dug out of the earth in quantity and quality sufficient.

Manure is composed mainly of vegetable and animal matter, that can only be procured in limited quantities. A large majority of farmers have land to work that is mostly below the middling quality, and have rent or interest to pay every year, besides maintaining their families and stock, and ought to be improving the last at the same time. If our instructors would put us in a way to accomplish this, their works would be much more valuable. The thing has been done, and can be done again. As to buying manure, except lime and plaster, for the use of farmers, generally, except those living near some town or village, it is out of the question, as at present prices it will not bear its weight to be carted more than six or seven miles.

It can be made on the farm with a small outlay of money, but it requires labor and persevering attention. When the yard is cleaned out to put on the wheat ground, spread a thin coating of straw over it, then haul in dirt, good mellow dirt; if to be had, but if not, get the best you can, and cover the yard four or five inches thick. Trim around all the fences in the latter end of August, and cart all the young bushes and briars into the barnyard, as well as weeds and other vegetable matter, leaves, &c., that can be gathered up on the farm.

When the pasture fails in the fall, put the cattle in the barnyard and there keep them till the pasture is fit to turn on again in the spring. If the winter should be a little open, so that dirt can be got, give the yard one or two more coatings; the straw not saved for litter, refuse of the fodder and cleanings of the stables, should be spread over the yard; let this accumulation lay until the first week in July, when it should be stirred, dirt and all, and put up in heaps or beds with steep sides. There should be nothing suffered to trample on these heaps, as it would in a measure prevent the fermenting process being properly carried on. These heaps should lay till about the middle of August, when it will be in a better state for the production of a crop of wheat, than ever it was before or will be again. The dirt thus put into the yard loses nothing in bulk, nor does it decrease the quantity or quality of the other manure; it only takes up the juices that would otherwise soak away and be lost;—it is quite as strong as the other, and saving the labor of hauling in and out and spreading, it is so much clear gain. There may be a great quantity of good manure made at the hog pen, having an outlet or yard attached, and supplied frequently with vegetable matter, such as green weeds, leaves, good dirt, straw, scrapings of the alleys in the garden, litter gathered up about the lane, &c., all of which should be taken out of the pen and and put in heaps, five or six weeks before it is carted to the field.

There are other means by which manure can be made, but not quite so fast. Make a vat or cistern of boards, nearly water tight, and sink it so that the top will be nearly on a level with the surface of the ground, with a covering to keep out the rain, large enough to hold about five cart loads of dirt—placed near the kitchen door. Chip dirt, droppings from the hen roost, good, mellow dirt, ashes, &c., may form the supply. Into this mass should be emptied all the soapsuds, urine of all kinds that can be procured, remnants of pickle, in fact all of the waste water from the kitchen, &c. After laying six or eight weeks, it should be taken out and put into heaps, and a fresh supply put into the cistern to be treated as before.

When the manure in the yard is put up in heaps to ferment, there should be another yard inclosed, with the soil either plowed up, or other mould spread over it for the cattle and sheep to lie on at nights, till the barn-yard is cleaned out and prepared for them as above directed. This out-yard should be loosened up, and mellowed with the plow and harrow, two or three times, and when the cattle are taken off, should be shoveled up to remain till wanted for use. Excellent compost for corn may be obtained as above.

In the foregoing I have endeavored to recommend plans whereby the greatest quantity of good manure may be made with the smallest outlay of money; yet labor will be required, and I think with proper industry and management it may be done without much additional force, or materially interfering with the general business of the farm.

The next article will be on the Formation of the Dung-Yard.

A Practical Farmer.

## Culture of Grapes.

Among the fruits that flourish in our climate, few are more deserving of cultivation than the grape. The vines seldom or never fail, under ordinary management, to bear abundant crops, they ocupy but little space in the garden—a half dozen planted on the border, and trained to a trellis, being sufficient to supply a small family; and the fruit ripens at a season when (if the peach fails, which is about three years in five) there is an almost complete dearth.

It is not altogether as luxury, nor indeed chiefly, that we would urge the culture of the grape, or any other fine fruit: it is even more valuable for its healthfulness as an article of diet. Every family of children should be provided with an abundance—and that of the best quality—for sanitary purposes, if for nothing else. There is no telling how many doctors' bills might be avoided if, during our warm and relaxing Southern summers, our children could have free access to a succession of well matured fruit. They have a natural craving for it at such times; and if they cannot get such as is wholesome, they will devour green apples, or any other crude stuff to satisfy their longings. It is therefore, as we conceive, a duty which every man owes to his family, to provide them with fruits and vegetables in far greater variety than is usually done. Many farmers do not appear to live for the purpose of enjoying life, so much as for adding to their stores. A planter will, with untiring industry, devote his energies to his tobacco crop—sowing the seed in January, and plowing, manuring, planting, cultivating, cutting, and then handling in various ways—all extending through a period of eighteen months for a single crop—while his fruit garden, if he has any, only receives his attention at odd times, when a few hours can be spared from the exigencies of the crops.—Whatever may be the proceeds of the farm, money will not buy these simple luxuries which a little expense and labor, well bestowed, would secure in ample abundance.

In the hope that some of our readers may be induced to plant a few vines this season, we proceed to give some brief directions for the preparation of the ground, and a description of some of the most estimable varieties of grapes. To grow the vine in the greatest perfection, a rich bed should be prepared for the reception of the plants. A hole four feet square and eighteen inches deep, filled with a compost of rich mould and well fermented manure—to which should be added old lime rubbish, spent ashes, broken bones, either or all—will serve a very good purpose. It would be still better to have the entire length of the border trenched and treated in this manner, to the width of four feet. The vine, when it bears profusely, is a great exhauster;

consequently the soil should be replenished once in three years with a liberal dressing of manure, spaded in.

The foreign grapes should be entirely discarded, as not at all adapted to open culture in our climate. Fortunately, there are several native kinds of great excellence, withstanding the cold of our winters, growing freely and bearing heavy crops. Strong rooted plants, at but little cost, may be had of most nurserymen; and this is a suitable time for ordering them, as well as fruit trees in general.—The reputation of the following varieties is well established:

**Catawba**—One of the oldest and most productive sorts, and succeeds well in all ituations. Bunches of medium size, berries round, pale red, and covered with a lilac bloom — Flesh slightly pulpy, very sweet, with a rich, aromatic flavor. Ripe in August and September.

**Herbemont**—A vigorous grower, and under favorable circumstances yields a fruit of great excellence. Bunches large and compact—berries under the medium size—fruit without pulp, and of fine flavor. A prolific bearer.

**Isabella**—Inferior in the quality of the fruit to the two preceeding varieties, but a greater bearer, and deserving of cultivation in every garden. Fruit very juicy, somewhat pulpy and possessing a slightly foxy flavor. Ripens earlier than the Catawba.

**Norton's Virginia Seedling**—Perhaps the most productive of all our native varieties, and a superior grape in every respect. The fruit never rots, the flesh not pulpy, and of a brisk vinous flavor. Bunches large and compact.

The **Diana** is a seelding of the Catawba, and is described as being a fine fruit. We have not seen it in bearing, but, from the description of it, we can safely recommend it. The **Scuppernong** is of but little value in this climate. It is hardy, and the vine grows luxuriantly, but is not productive as far North as the James or the Appomattox. The **Bland**, though an old variety, and formerly cultivated under the name of the "English grape," is a delightful fruit, but the vine is not so hardy as some others, and is soon exhausted by over bearing.

At another time we shall have something to say of other species of fruits, but for the present we earnestly commend the grape to all our readers. When it is not convenient to obtain rooted plants, cuttings of the last season's growth may be used in their place. The wood of some varieties strikes root freely. The length of a cutting should consist of three or four joints. The lower end should be at base of the bottom bud, and two or three inches of wood left above the upper end.—Plant in a rich, shaded, moist peice of ground, the upper bud being even with the surface, and suffer no grass or weeds to grow. After one season's growth the plants will be large enough for removal.—*Southern Planter.*

* * *

## Mules.

Several large droves of Mules have passed through this place the past week, and high prices were asked, though the stock was generally good. Several sales were effected, as our planters now feel the necessity and see the economy of substituting mules for horses on the plantation. Why they do not raise their own Mules, appears strange, as it is attended with so little trouble or expense—Think of $240 a for mule, these times!

*Cheraw Gazette.*

* * *

## Galls from Harness or Saddle.

Major Long, in his written and valuable account of his expedition to the Rocky Mountains, says that his party found white lead moistened with milk, to succeed better than any thing else in preventing the bad effects of gall on their horses' backs, in their fatiguing march over the plains that border the mountains. Its effects in smoothing the irritated and inflamed surface was admirable.

*Amer. Farmer.*

Death From Hemlock.—Dr. J. A. Stanfield of Leesburg, informs us that he called a few days ago professionally, to visit the family of Samuel Johnson, Esq., in Person county, and that on his arrival he found two negro girls, aged 7 and 9, corpses before him, after about 12 hours sickness, and two others, a boy and a girl sunk so low that one died the next day and the other the day afterwards.—A negro man was also taken ill while the doctor was present, but he now bids fair to recover. A postmortem examination satisfied Dr. S. that the negroes died from the effects of hemlock, incorrectly termed by some, as poisoned angelico. The children had been in search of tooth brushes made of various kinds of weeds and bushes. So much for mouth mops and the detestable practice of "dipping." *Milton Chronicle.*

## "Sunday Corn."

We find the following going the rounds of our exchanges. The person who is so lost to all feelings of reverence for his Creator, is not fit to live in an enlightened country, and should be sent to some heathen land. He is certainly below the level of any thing but a heathen or a brute:

"An American infidel boasting in a published letter, that he had raised two acres of "Sunday corn" which he intended to devote to the purchase of infidel books, adds, "All the work done on it was done on Sunday, and it will yield some seventy bushels to the acre, so I don't see but that Nature or Providence has smiled upon my Sunday work, however the priests or the Bible may say, that work done on that day never prospers. My corn tells another story." To this an editor of an agricultural paper replies: " If the author of this shallow nonsense had read the Bible half as much as he has the works of its opponents, he would have known that the great Ruler of the universe does not always square up his accounts with mankind in the month of October."

Extraordinary Yield of Corn.—In presenting, says the Washington *Union*, the following communication, we desire to say only that we have received the most satisfactory assurances of the entire reliability of statement made therein:

Washington, D. C., January 8, 1858.
*To the Editor of the Union:*

Dear Sir:—The crops of corn exhibited for premiums this year at our agricultural fair in Pettis county, Missouri, were so remarkable for their yield that I deem it due to my county, to my State, and to the country, to give them as reported by the judges appointed by the association to ascertain the quantity and award the premiums. The crops entered for competition were those of Samuel B. Scott and Geo. S. Priest, on Heath's creek, and Wm. Gentry, on Muddy creek, in said county. The products of the several crops, as reported by the judges, and upon which the award was made, are as follows:

| | | | |
|---|---|---|---|
| S. B. Scott's | crop, | yield per acre, | 241 bushels. |
| G. S. Priest's | " | " | 185½ " |
| W. Gentry's | " | " | 135 " |

The corn was *all drilled*, in rows three feet apart, and raised on *upland* prairie lands. This is but a specimen of thousands of acres of land we have in the same county, as yet unsettled and uncultivated, to which we invite the attention of the intelligent and enterprising farmers of every State in the Union; assuring all such who may deem it wisest and best to cast their lots with us that they will meet with a hearty welcome—a healthy and a happy home.

Very respectfully,
JOHN S. JONES.

Peach Tree Borer—Tansy.—We saw it stated two years ago in an agricultural journal, that these pests could be driven from peach trees by tansy. We planted it at the roots of some ten or twelve trees, and not one of them have been disturbed, whilst others are injured. This spring we intend planting it around all.—*Newberry Sun.*

A subscriber and friend enclosed the above, and adds that wormwood will produce the same effect.—*Charleston Courier.*

# EDITORIAL.

RALEIGH, MARCH, 1858.

## Agents Wanted.

We want active, persevering Agents, in every county, district and neighborhood in this State, and all the Southern States, to whom we will allow a liberal per centage on all cash subscribers obtained for the NORTH CAROLINA PLANTER. And we wish it to be distinctly understood we take no credit subscribers. Postmasters and others who may be disposed, are requested to act as our Agents in procuring subscribers, to whom we will allow a liberal per centage. To active, enterprising men, who will attend the Courts and public gatherings, this agency can be made to pay well. Specimen copies sent to those wishing to act as Agents. For further particulars, address,

A. M. GORMAN, Raleigh, N. C.

## Words of Encouragement.

The flattering tokens of appreciation and strong terms of commendation with which our "Planter" has been received, have greatly encouraged us in the high undertaking we have assumed, of furnishing the Agriculturists of North Carolina with a home journal. All previous attempts to sustain an Agricultural journal in this State, had failed; and while we felt that such a work was greatly needed in our midst, yet we yielded with fear and trembling to the solicitations of gentlemen to enter upon the publication of the North Carolina Planter, lest we might not be sustained.

The January and February numbers have been issued, and we are greatly pleased to learn that they meet the expectations of its friends. One gentleman writes us from Washington county:

"I have received the first No. of the North Carolina Planter. Having been a constant subscriber to and reader of all the State Agricultural papers since one was attempted in N. C., and having with deep regret seen them all abandoned, I may be allowed to express the pleasure I felt in finding that you had determined to publish the Planter. I enclose the subscription price for one year and desire you to send it to my address.

Surely you can get five thousand subscribers, with payment in advance. The Planters of North Carolina surely, have too much State pride, and know too well what their own interest is, to suffer this effort of yours to fail for want of patronage."

Several have written us that they conceived our first No. the best Agricultural issue ever made in the State. A number of others have assured us that if the Planter continues as well as it has been begun, it will impart information of incalculable interest and importance to the State. And from all quarters we are cheered on by declarations of deep interest in the work we have undertaken.

These all inspire us with renewed energy in our enterprise, but they are not sufficient to command success. Two other things are indispensably requisite to this end:

1st. Our circulation must be greatly increased. Give us a good, liberal patronage, and we can make the Planter a credit to the State. There are many improvements we want to make, but cannot afford it with but a few hundred subscribers. Give us a few thousand paying subscribers, and we promise to make the Planter equal, in all respects, to any Agricultural journal in the country. We earnestly solicit all friends of Agriculture to give us their influence and co-operation in getting subscribers to the North Carolina Planter.

The other indispensable pre-requisite to success, is to be derived from our Planters themselves. They must write for their Agricultural State paper. We may fill our pages, from month to month, with judicious selections from our excellent exchanges, but they are not equal to contributions from our own State. Its matter must have home locality and identity, in order to be prized and appreciated. We therefore make an earnest appeal to every tiller of the soil in North

Carolina to give us a letter, (if they have not time to write at length, let us have a short one,) giving their experience in some department of farming.

One can tell us of his mode of cultivating Tobacco—another of curing it. One of corn—another of wheat—one of oats—another of the grasses. Some on plowing—others on reaping. Some on barn yard and other domestic manures--another of guano, lime, plaster, &c. Some on the rearing of horses, mules and hogs—another of cattle, sheep, goats, &c. All can contribute something, about farming, gardening, the orchard, the meadow—some department—which will make our paper be sought for with avidity by all interested in the farming interests of the State. If one will write, another will, and each will be mutually benefitted. We hope to have an abundance of contributions hereafter.

☞ There seems to be some misunderstanding, with subscribers to the "Arator" and "Carolina Cultivator." We have not the books or accounts of either of these late publications, and have nothing to do with their settlement; nor have we contracted to supply subscribers to either of them with the "*North Carolina Planter.*" In a word there is no connection whatever with our list and theirs.

☞ We supply such as send us the money for the "*Planter,*" and none others.☜

We sent the first number of our paper, it is true, to each of the subscribers to the Cultivator and Arator, but in that issue distinctly stated that no other numbers would be sent, except to those who remitted us money for our paper. We did remark, however, that to such persons as had received portions of a volume of the "Cultivator," we would send a sufficient number of issues of the Planter to make up a volume, *provided they would send us* $1—the portion belonging to Mr. Cooke to be handed to him and placed to their credit on his books, and the remainder to go for whatever length of time it would pay, for the Planter. This we are ready to do yet. But we think the best way would be for each one to settle with Mr. Cooke, for the Cultivator, and pay us for the *Planter*, without reference to their subscription to other works.

Our plan is the cash in advance system, and we shall adhere to it rigidly.

## Our State Agricultural Society.

We love to contemplate Agriculture under the higher aspects of its influences. We love to trace out the various ways in which its improvement tends to lift men up to higher planes of thought, than the material; to cause men to look "from nature up to nature's God;" to foster and refine the social qualities of our nature; and to inspire within men those high moral feelings, of which our nature is susceptible.

Agriculture we regard not merely as the great material interest of the State, but also as a pursuit which has much to do with the social, intellectual and moral condition of our people. And we should labor to promote this great interest, not merely as an agent to secure physical comfort and material wealth, but also as an agent to develop the social, intellectual and moral health of the people. We should look to agricultural improvement and progress, as one of the great means of improving and elevating our civilization, and securing for us that social refinement, intellectual strength and moral worth, which belong to the noblest of men.

It was doubtless under such exalted views as these, that Agricultural associations were first sought to be organized and sustained; and such ends have uniformly been promoted, when the constituencies of these associations have fostered and encouraged them.

And may we not claim that much of these good consequents have resulted from the organization of the North Carolina State Agricultural Society, and our State Fairs? Partial and contracted as their influence has been, in comparison with what should have been effected, yet those counties and citizens that have availed themselves of their advantages have reaped and will reap prosperous rewards.

And it must be so by the very nature and force of combination and concentrated effort. No man can attend the annual meetings of our State Society, and listen to the interesting statements, valuable suggestions and able debates which from time to time are elicited, without being much benefited. Nor can he fail to be gratified and instructed at the intelligence, industry and faithfulness which are being brought to bear to elevate the character of agricultural pursuits in North Carolina, and the numerous practical results they have reached.

And it may not be amiss, in this connection, to speak of the responsible and arduous duties devolving upon the Executive Committee of our State Society. To them are committed, in a great measure, the paramount interests of the industrial pursuits of the citizens of our good old State. The improvements, the success and the honor of the State are in a great measure committed to their keeping. To them are submitted statements of much value to the great body of our people—statements of wise and comprehensive views; carefully prepared plans and suggestions. This Committee has become, as it were, the engineers for the State, of all the direct and side influences of agriculture applicable to the growth of North Carolina and the welfare of her people.

And while we should hold them to a strict account of their stewardship, yet we should keep far from us a captious spirit of fault-finding, because all their actions may not correspond with our precise views of things and measures. We must remember that theirs is a labor of love, that they have no sinister ends to carry out, but are honestly laboring for the united good of a united whole. That they must by patient work, and inquiry and examination, unaided by the hope of money-reward, cause themselves to become the exponents of the facts, principles and suggestions made to them, to the great body of the people. And *they* should also remember that they are expected to give these facts to the people, and not lock them up in the archives of the Society.

These are the means to carry North Carolina forward to the unfolding of all her agricultural resources and capabilities, until the State shall become garden-like in production and beauty.

But this article is already too long:—we must defer further remarks till another issue.

☞ We are glad to learn that the Granville County Agricultural Society is actively engaged in perpetuating its usefulness as an organization. A beautiful site, at Henderson, has been purchased for holding the County Fairs, which is now being substantially enclosed.

We should be glad to hear from any or all the County Agricultural Societies in the State.

## Important Home Truths.

We were much pleased on reading the following article from the Rutherfordton (N. C.) Enquirer, and would commend it to the careful perusal and reflection of our Planters. It contains some important home truths, that may be profited by:

Mr. Editor:—That an evil must be known, to be remedied, is an obvious fact. That it is our friends who point out, and warn us of our faults, is as true as that truth is unpleasant. The agricultural errors of the South are not only great and general, but ruinous if carried into general use. The idea that a man must every five years, open a new field to supply the place of the old and exhausted one, is one of the most ridiculous. Suppose the world were to adopt this theory for the next hundred years, with its increasing millions, it is but too plain that famine dark and sweeping would desolate our earth. It seems, to look out upon and travel over this State, that the use of the grasses is almost wholly unknown or neglected. And being thus neglected, one of the most productive sources of wealth is lost to the country and to the world. It is not too late in the season to commence in an agricultural regeneration, and instead of your State presenting one general scene of barrens, the green pastures may be covered with lowing herds. The farmer may rejoice in his waving grass and well stored barns. Clover is your great want.—You have thousands of acres of land that is now not worth the taxes you pay upon it, that might be worth twenty or thirty dollars per acre, by only a slight attention to the sowing of timothy and clover. Young men, farmers of North Carolina, it is to you and your fathers we address these hasty thoughts. Turn over your old fields, plough deep, sow clover, again sow wheat and clover, and see how long before the face of nature will be changed. Pay less attention to the breeding of hounds, and more to that of horses.—The sleek fat beeves and golden rosy flavored butter of New York, are not the produce of broom grass and scrub pines. You possess all the elements of a rich grazing country. Because it is not so here, is no reason it should not be made so. Because fifty years have been spent in exhausting your State, is the strongest reason why the future should be devoted to regaining your lost position, instead of making a virgin soil the victim to the same ruinous process.

STRANGER.

## Price of Cotton.

In our February number we took occasion to express the opinion that Cotton would be higher in price than it was at the time that paragraph was writen. Since then, cotton has advanced some two or three cents in the pound, but has since declined. It is now selling in most of our southern markets at from 10 to 11½ cents.

It seems to be the opinion of many who have the best opportunities to form reliable opinions on the subject, "that there is nothing in the position of cotton or cotton goods to justify the considerable advances reported by the late steamers from Europe; and this advance must not be looked upon as having any proper basis. The rapidity, it is said, with which prices have been forced up, is doubtless for the purpose of tempting large and immediate shipments from this side.—But circumstances are such that quite the contrary effect will be produced." Our planters, however can well afford to take 10 or 11 cents, and had better sell at these prices when they can.

QUERE? A Correspondent says: "Allow me to ask a question of some of your readers competent to give the desired information:—Can the Horse-powers usually employed to thrash Wheat, be advantageously used to pick Cotton?"

Will some one please answer?—EDS.

## The Meadow.

There can be no doubt that this important branch of agriculture has become to be much more neglected than formerly, in North Carolina. It is greatly to be deprecated, as the raw bones of our cattle and horses too mournfully testify at this season of the year. *Why* it has become to be thus neglected, we have not heard any reason assigned. It cannot be, surely, that hay-raising is not profitable, or that it does not meet with ready sale in our market. On the contrary, the best of prices are paid for it, and we have to send north to supply the demand.

We have heard, however of a great annoyance to which our grass-raisers are being subjected; the great amount of broom straw that is springing up in their meadows, to the displacing of the nutritive grasses. The fields of broom-sedge that grow contiguous to the meadows are allowed to ripen, their seeds are borne away upon the wings of the wind and deposited in the meadows, and there spring up, to the ruin of the meadow grass. The old interloper is doubtless a most unwelcome intruder, but its inroads can be very effectually cut short by turning it under with the plow, before its seeds begin to ripen; and to some extent it may be made a slow fertilizer to the old exhausted portions of the farm, and also prevented from damaging the meadows.

We throw out these suggestions on this subject, and would be glad to have the views of some of our friends in that section of the State where the grievance complained of is most felt.

## Manure Sheds.

Are you not satisfied that manure made under cover is superior to that made in the open air and exposed to the effects of the sun and rain? There can be no doubt of this, and the sooner you avail yourself of the benefits of manure sheds the better for your farm and your purse. They are cheap and their advantages will more than pay the cost of their construction in a single year. Run up a shed on each side of your barn yard and cover it with cheap boards or slabs.—You will find that the greater portion of the manure will be dropped under these sheds, and all litter and muck deposited there will be manufactured into superior fertilizers.—Cattle prefer a shelter to the open air, even in the summer season, when it is stormy.

By all means build a good manure shed. The expense is a mere trifle. You have plenty of timber. The sawyer's bill will be very little. A few nails and the services of a carpenter for a day or two, with what you can do yourself, and the little job is done.—If you can't afford the plan we have indicated, make it still cheaper by rearing a skeleton frame of poles and cover with stalks or pine tops. Build some kind of a shed at any rate, and throw under it all the scrapings of the yard and as much muck, leaves and litter as you please. It *will* pay.

We have somewhere read the recorded experience of a practical farmer who made a note of the difference between manure made in open yard and that from under cover. He applied equal quantities to equal areas of ground; planted it in corn, and cultivated the two plots precisely alike. It was not necessary to wait until the crops were harvested to become satisfied of the comparative value of the two kinds. The corn on the ground where the manure from the shed was applied was far more luxuriant, ripened earlier and yielded about one-third more of sound corn.

Try the manure sheds and you will find that you will have more manure rich in fertilizing qualities, and actually worth about double the dry and leached article you have been spreading on your lands, and boasting of the great effects that even that had upon your crops.

## Loose Boards and Shingles.

These will demand your attention. The wind at this season of the year will take large liberties with such. You will find after a big blow that a board is gone from your fence or barn and divers shingles from your roofs.—"A stitch in time saves nine," is the motto of the farmer's wife, and his should be "a *nail* in time, &c." Make every break snug at once, and you will save yourself much loss and vexation.

## Water furrows and drains.

Of course you have kept these open during the winter. Don't forget them now. If the drains become clogged, the grass lands will become overflowed and injured. Surface water, especially when frozen, injures almost every crop. You remember how your wheat has been "winter killed" in past years, and that it has always been the most effectually thined out in spots where the water stood during the winter and repeatedly froze and thawed. Look to the water furrows—there may be a hard freeze this month—keep them open and the water carried off.

## The Boys.

Your boys are growing up rapidly as poke stalks in Spring time, and after a few more crops they will be men and "free." They spend hours in laying plans for their future. Are they all contented as farmers? You should inquire into this, and if you are not able to give them all a farm, why put one or more of them to a trade. Tom has always been building houses with cornstalks, you observe; then let him be a carpenter. Joe has all his life been making pictures and shaping letters; and can anything be plainer than that he is designed for a painter? It is well to consult a boy's inclinations in choosng a trade for him. If they are to be farmers, endeavor to make farming attractive to them, and have their affections so linked to the old farm that, in after years, they shall love to return to it and wander over its fields as a cherished Mecca. To do this, farming must be rendered a work of intelligence and taste and yeilding a profit equal to other callings. The mind must be cultivated and its development kept up with their growing muscles. They must be made to feel that their interests are identified with the soil they till. Encourage them in reading books and journals upon their business. Their information and intelligence will be in proportion to what they read and study; and if taught to regard farming as a science, rather than a drudgery, they will form a taste for it that will cling to them through life. Invest a few dollars every year in books and journals devoted to farming and place them in the hands of your sons. You will find their fertilizing effect like guano upon your fields, and a like happy effect upon the minds of your sons. —

◆

## Prize Plowing.

It has occured to us, that by far too little attention is given at our State Fairs, to the Plowing Matches for which Premiums are awarded every year. Very few seem to regard this department as worthy their attention, when, in truth, it is one of the most valuable importance—an importance which every one acknowledges when he comes down to the every-day operations of his farm.

We do not profess to be competent to make suggestions to a body of men whose daily business is "to follow the plow"; but as one who does himself both "hold and drive," we may express the hope that more attention and importance will be given to this subject at our next State Fair. The discipline of the team, the skill of the driver and plowman, the laying off the land in proper lots, uniformity in breadth and depth of furrow, the kinds of plows used, and such like considerations, should all be faithfully exacted and strictly attended to.

◆

## Correspondence of the Planter.

☞ An intelligent Farmer in Lincoln county, writes:

> "I am pleased with the contents of your first No., but cannot agree with your correspondent who recommends its monthly issues without a cover. It too much resembles many farms of our State, with bad fences, imperfect gates and barns, detracting much from the character of the farm tho' the crop may be good. I may occasionally send you some articles for the Planter; and I certainly wish you great success in your undertaking. R. J. M."

We thank our correspondent for his frank opinion, and entirely concur with him as to the *appearance*, which a cover for the Planter would give. But the idea of our former correspondent, to give a good substantial cover at the close of the volume, is one of *practical utility*, as explained by him. We promise however, if our Planter is well sustained, so as to justify the additional expense, that we will give a neat cover to each number. To use a homely phrase, "a child must crawl before it can walk."

We shall hold our friend to his promise to give us an occasional article for the Planter; and let all our agricultural friends follow his example.

☞ The following letter, from one of the most intelligent and enterprising farmers and citizens of the State, contains some suggestions which may be read to profit by all our citizens. It is a lamentable fact that while our own State Agricultural Society and Fairs languish, and fail to meet public expectation—while large numbers of our citizens fail to associate themselves with our State Society, and to present articles for exhibition at our State Fairs, and thereby enhance the agricultural and industrial interests of *our own State*, they are contributing of their means, their time and their productions, to build up—(shall we call them *rival*)—institutions in other States. This ought not to be so.—Our first duty is to *home;* and then to our neighbors. *North Carolina* should claim the "firstlings" of all our energies and efforts for her advancement and prosperity; and we hope now that we have a *home* Agricultural organ, that promises to be permanent, and especially adapted to the wants of our own people, that all of the talent, energy, public spirit and liberality of her citizens will be contributed to build up our State Societies and our State Fair; not forgetting the North Carolina Planter.

Our friend promises to make efforts to procure us subscribers. This is the first good move for all the friends of the paper to make. But we hope he and others, will also favor us with articles for its columns.

Our readers will recognize in the name, one who has long been one of the most influential, active, public spirited men of our State.

The following is his letter:

SCOTLAND NECK, Feb. 20, '58.

*Editors of the North Carolina Planter:*

I was not aware, until the receipt of the January number, that you proposed to publish an Agricultural paper in Raleigh, in place of the "Cultivator" and "Arator."

You have, my dear sirs, my most cordial wishes for its prosperity; but as long as our people continue to extend their patronage to *foreign* journals, (published out of the State,) and to contribute their money to encourage Agricultural Societies and fairs from home, to the neglect of our own, I have little hopes for either.

Having been confined to the house for some weeks by indisposition, I have had no opportunity of making any effort to get subscribers to your paper—I will endeavor to do so soon.

Enclosed you will find my subscription for the year, which I will cheerfully double, if it is necessary to sustain your paper.

Respectfully, &c.
RICH'D H. SMITH.

---

☞ A gentleman from Richmond county writes us thus encouragingly:

The first No. of the N. C. Planter is to hand. I am very much pleased with it. It has quite an amount of interesting matter—much more than the Georgia and Alabama papers, though not so large. Besides, it is better adapted to our climate and soil, and it is a North Carolina Paper. I trust it will be well patronized. I consider that I have received the value of my dollar in the first number.

This being my first year at farming, I am at a loss in many matters. For instance: I have a piece of worn-out land, grown up in broom-sedge, pines and persimmon trees: the soil is red clay, mixed with soft slate and white flint rocks. I would like very much to see the views of some of your experienced contributors to the Planter, in regard to improving such land in the cheapest, surest and quickest way. But being but a "one-horse farmer" yet, and no part of a Geologist, I will wait and try at some future time to give you a better description of the soil and get the desired information.

---

☞ The following letter, in reply to "Franklin's" interrogatories in the February number, concerning Hogs and bitter mast, is from an extensive hog raiser in Johnston county, and may be relied on:

EDITORS PLANTER: *Gentlemen:* I see in your February No. a communication signed "Franklin," asking what shall be done to counteract the effects of the bitter acorn, which the hogs have been luxuriating upon during fall and winter. I will try in my feeble and disconnected way to give "Franklin" my plan, by which I think, if properly attended to, he will not lose a single hog from the bitter mast, and but few by any cause. In the first place I will state how hogs should be managed generally: At every feeding place there should be at least three pens; one for your small pigs, another for your shoats, and one for your breeders. Each one should be fed separately. By thus arranging your pens you can feed to better advantage, for frequently one hog requires more than another. Each pen should have a good trough in it, for giving medicine. The trough should always have a half bushel or more of strong ashes in it, well mixed with salt—which hogs will eat freely—and occasionally mix a small portion of copperas. This cleanses the hogs of worms and stops nearly every disease the hog is liable to. In spring and summer you should give small quantities of sulphur once a week, also rub on tar mixed with lard. The sulphur and tar will keep them clear of ticks, which are more dangerous than bitter mast. The salt, ashes, and copperas should be given the year round

Hogs which have fattened during fall and winter, upon bitter mast, or peas, or anything else, should be kept as near the same order after the mast is gone as before, by feeding with corn, giving close attention, and using the medicine before mentioned; and I will assure "Franklin" that he will find the bitter mast worth a great deal to him in the future. But should he be short of corn, and fail to keep his hogs in good order after having been once fat on any thing, I care not what—corn, peas or bitter mast, and leave them to sustain themselves on grass, worms, and roots during spring and summer, more than half will die; and if all were to live, they would not make half the pork, as if kept well and were well attended to. If you think these remarks will be any advantage to "Franklin," you are at liberty to publish them.

Yours, truly,

JOHNSTON.

NASH CO., N. C., Feb. 24, 1858.

DEAR SIR: Your February No. of the N. C. Planter is full of useful information. I hope your request, that every farmer will contribute to its columns, something which he has learned from his own experience, may be heartily responded to, and especially by those of our own State.

The Planters of this State are more likely to profit by the experience of their own, than of other localities. While it is true that some of the leading agricultural principles and deductions are applicable to all countries and climates, it is also true that very many experiments productive of good results in some of our States, would prove failures in our own. We desire to know what *our own* farmers are doing. And the Planter promises to be the medium through which this knowledge can be obtained. Too many of our farmers are inclined, (when they do write,) to give successful experiments only. Now, I believe that great good might be done in giving true statements of those unprofitable innovations, which not unfrequently occur, from their probable results; and our anxiety to arrive at truths have led us into error, and which are likely to deceive others.

It is sometimes important to prove that a probability is not a fact. In the absence of known results, we all act upon probabilities. The truth is sometimes very near us, but we are far from it. Small causes often produce great effects. Farmers are not chemists.—Chemistry, to be understood, requires a length of time, altogether more than a tiller of the soil can devote to it. Experience, then is the school to which we can go; the time and expense are inconsiderable. It is true it would be much more desirable to know the cause, as well as the effect of all things pertaining to our profession; why two substances neutralize each other—why two solutions throw down a precipitate when mixed; but if we cannot know the why and wherefore, we can jump at conclusions. If a farmer mixes two fertilizers together and lessens their value, do not presume that everybody knows that. If he find how to make more pork with less labor and expense than his neighbor; that is just what we want to hear. Come, out with it—"good ingredients make a good composition," is a general rule; let us find the exceptions, and especially in composting our manures.

I have as little time to devote to writing, and feel as little adequate to the task as I ought to have and feel, but will give the result of my Irish potato crop last year, in the lower part of the county. To ¼ acre of good lot-land previously broken up, I took a good one horse turn plow and run a furrow on one side as deep as I could, dropping my cuttings about 15 inches apart in this furrow; then filling the furrow nearly full of manure from my cow lot, made of wood mould and dropping, upon that I put pulverized charcoal at the rate of 3 bushels to ¼ of an acre, took the plow back to the end where I began, and ran another furrow, filling and completely covering the first and making another excavation with my second furrow, which I treated in the same way as the first until all was finished; and then covered the whole with oak and pine leaves, 6 inches in depth. I made over 100 bushels of nice potatoes, entirely free from disease. Oat or wheat straw I think would be better. Plant the first suitable weather after middle of February to 1st April, cover when the land is moist and as warm as you can get it.

BEACH RUN.

## Receipts for the Planter.

The Planter is published strictly upon the *Cash in advance* principle—and is sent to none except those who have paid for it. We deem it useless, therefore, to publish our monthly receipts, as the *regular* reception of the paper, is of itself a receipt to the person to whom it is addressed, that the Publisher has been paid for it.

Subscribers need not fear any accounts being presented against them for the Planter. We enter no names on our books unless the money accompanies them. We then mark them paid. At the end of the time paid for we shall make a CROSS MARK on the paper; and if the money be not sent for renewal, the paper will be discontinued. We keep no *debit books* for the Planter.

# HORTICULTURE.

**S. W. WESTBROOK, EDITOR.**

## Remarks on Orcharding.

*Continued from February Number.*

### MULCHING AND ITS EFFECTS.

No people in the United States are so highly favored with a climate and position so favorable to the growth of Agricultural and Horticultural products, as are the citizens of the Southern States; and yet all are constrained to say, that our people, to a great extent, fail to make use of these advantageous circumstances. Our climate is dry and arid, in comparison to other portions of the States; the influence of the sun is more powerful upon the earth's surface in the Southern than it is in the Northern or North-western States, and consequently its warming and invigorating influence awakens all the dormant elements of vegetation at least four or five weeks in advance of the vernal season North, and much earlier than it does on the other side of the Alleghany range of mountains. Our geographical position, facing the South-eastern sun, may be compared to an extensive hot-bed,—the back-bone of the Blue Ridge representing the elevated position of the back portion of the hot-bed frame, and the over-hanging cliffs the edge of the sash projecting over just far enough to reflect back upon the bed below the ameliorating and warming influence of the morning sun. But while we are blessed with these natural advantages, we need not expect to be profited by them, while we do not know how to use them to secure the best results.

In our first article (in the January number,) we gave our views upon the preparation of the soil preparatory to planting an Orchard; and the same thorough mode of preparing land for all crops is highly important in the Southern region, and more particularly so in the mountain and table lands of the Southern States; for the reason that when a great amount of rain falls during the Winter months, it does not run off and wash away the surface into the bottoms of the rivers, as it does under the skimming system, but the water sinks down, as far as the earth has been broken, and a great portion remains there until Spring, which may be kept there in sufficient abundance to keep the tree or plant in a vigorous condition, even in the midst of a drought, if the land has been well mulched.*

By mulching, we mean the covering of the land around and over the roots of trees or plants, or anywhere else, with vegetable matter of any kind, to a sufficient depth to prevent the evaporation of the moisture from the soil by the influence of the sun. By this process moisture is kept in store for the use of the plants much longer than if the mulching had not been applied. There are different modes of mulching, suited to various crops and trees. For some crops the mulching or vegetable matter applied should be very fine, in order to secure a good result; while other crops may be mulched with whole leaves, straw, shucks, or anything that will prevent evaporation. And in some instances it is important that the mulching should be incorporated to some extent with the surface soil, so that the warming rays of the sun may have some influence upon the roots of the growing plants, and at the same time not evaporate the moisture too suddenly. Such crops are cabbages, cauliflower, beets, onions, bunch-beans; and for the English Pea there is nothing like mulching; it will cause the plants to bear twice as long as they would without the use of it.

The articles to be used for mulching the foregoing crops, should be the pulverised portion of old rotten logs, mixed with rotten leaves, old rotten straw or any other well-rotted vegetable matter that can be obtained. When the plants are about six inches high, stir the soil thoroughly some six inches deep, and immediately apply a coating of some two-and-a-half inches thick between the rows; and if the weather is dry, water the mulching liberally every other evening after sunset. In about two weeks after the mulching has been applied, fork up the soil some three or four inches in depth and at the same time incorporate the mulching to some extent with the surface, but be careful to leave the larger portion on the top of the soil; and during the growing season continue to stir the soil beneath the mulching and gradually incorporate it with it; and if the weather is still dry, use the garden engine or the watering pot liberally, to make artificial showers every few evenings after sun down. By this mode as fine vegetables may be raised in our climate as can be raised in California or in any other part of the world.

---

*Note.—We do not pretend to say that all lands can be mulched to a general extent; but we do say, that mulching is indispensable to success in the culture of some crops, to secure a good yield; and some trees will not grow or last long in our climate without mulching.

We hope our readers will pardon us for the digression we have made from our original subject, as we have had some cause to do so, to show what the effects of mulching are upon plants as well as trees, although trees need a larger amount of mulching than annual or biennial plants. Each newly transplanted tree should have a coating of at least two or three inches of rotten straw, leaves, tan, weeds or hay spread around the tree, covering a circular space of some three feet in diameter; and if there should be a severe drought, it would be well to pour water over the mulching about once a week late in the evening. For newly transplanted Cherry trees, this mode of treatment is highly recommended; but let the application be more liberal and cover a larger space from the stem of the tree in every direction, applying the larger portion of the litter on the South-west side of the tree. Cherry trees require more mulching than any other kind of fruit-tree in our climate, because they have not undergone sufficient acclimation to endure the scorching effects of our burning sun. Many of the improved varieties were originated by Mr. Knight, of England, in a climate that is much more humid than ours; and unless they are well mulched, immediately after they are planted or before the droughts of summer, there is not much chance for success. In a word, we highly recommend mulching for all newly transplanted trees, whether orchideous or ornamental; and for the orchard, a repetition annually, but more abundant each year, as the tree grows larger until it arrives at full size; and then a large wagon load will not be too much for each tree for an annual dressing. And it should be spread all over the surface as far as the roots run in in every direction; but there is no necessity for applying the litter nearer than three or four feet of the root or stem of the tree. But befo e the mulching is applied each spring, the dressing of the previous spring should be plowed under and well mixed with the soil, thereby adding vegetable matter to the soil annually, which is highly important to keep the tree in a healthy growing condition.

In order to prove to our readers that the above practice is highly important, we will refer them to the fact, that a large portion of the fruit trees in the Southern States defoliate themselves during the months of August and September, just at the time their vernal dress is most needed to exercise their important offices in shading the limbs and trunks of the trees, and of inhaling the necessary elements from the atmosphere which are important to be transmitted to the tree and fruit through their agency, and for the want of which the tree and fruit must suffer prematurely. Now, we assert, that if a supply of vegetable matter is worked into the ground in and about the ends of the roots of all orchard trees every year, and they are liberally mulched, the trees will not defoliate themselves, nor drop their fruit, until the proper season; and the happy result will be, that our winter apples will not be fall apples, as is now the case, for the want of proper management.

## The Caterpillar.

Now is the proper time to forestall the ravages of the Caterpillar, while the twigs of the trees are naked. The moth, or butterfly, that propagates the caterpillar, forms a ring-like cocoon or bulk around a small twig, in which they deposit hundreds of eggs which remain in a dormant condition until the buds on a tree begin to open in the Spring, then they hatch out and descend to the first fork below the old nest and form a tent-like screen of webbing over themselves, to shelter the colony from cold winds and rains. Hence the origin of their appropriate name, Tent Caterpillar.

During this month, or at any time while the trees are in a state of defoliation, they may be exterminated by giving each tree a few moment's attention. Select a clear open day for the work, and examine each tree in the orchard minutely, and cut off all the twigs containing the bulbs and burn them. All that escape may be easily detected after they hatch out and form their colony. The best time in the day for capturing them is in the morning, while the dew is on the foliage. Take a long stick with a number of small knots on the end of it, and with the stick twist the web and caterpillars all out of the fork of the tree at the same time, and crush them on the ground; or they may be destroyed in any way that may be most convenient. But while you are performing the work of death in your own orchard, try to get your neighbors to attend to the same important matter; for if you exterminate every insect on your premises, and your neighbors permit them to multiply without any abatement, how can you expect to succeed while myriads of these pests come into your orchards from adjacent gardens?

One more important hint, if you please, while we are on this subject. If you are so unfortunate as to have any old fogy neighbors, that oppose all *Book Farming*, and all improvement obtained through that source, let us beseech you to be very careful to never let them know where you obtained your information, under any circumstances whatever. *If you do*, we are of the opinion that they will engage in the caterpillar business, for your *express annoyance;* for we have arriven to the legitimate conclusion, (from sad experience,) that such people believe that the printing of books about farming, or any other improvement that may interfere with primitive customs, is an unpardonable sin, according to the teachings of holy writ.

* * *

## Grafting Bandages.

In grafting fruit trees above ground, as when a worthless variety is headed off and choice varieties inserted, it is necessary to use something to exclude the air in order to secure success. Clay and wax have generally been used for this purpose, but the following plan, which we have practiced with success, is far preferable, being neater and more easy of application:

Procure well worn cotton or linen rags and tear them in strips of about one inch in width. They may be of any length. Roll these like a surgeon rolls his bandages, or if you are not sufficiently adept at this, you may roll them upon a small stick. Have them rolled smooth, and let the end of the last strip wound always overlap the end of the former, otherwise in using them it will be difficult to find the ends. Make up as many of these rolls as you choose, having them one or two inches in diameter, according to your fancy. Now, make a composition in the following proportions: Resin, 1 lb.; Beeswax, 1 lb.; Tallow, 1½ lb.; melt, and when perfectly mixed in the pot, place these rolls, (the last end being fastened by means of a pin or string to prevent its unrolling,) not simply to *soak*, but to *boil* in the mixture until all foam and bubbles cease to rise to the surface; for not until then is the air expelled from the rolls and the vacuum filled with the wax. After the bubbles cease to rise, the rolls may be taken out and hung up to dry and cool. To use: graft in the usual manner and bandage with these air tight plasters by unwinding it as needed. A few turns will exclude the air and insure success.—The warmth of the hand will cause it to stick without tying; and if the rags are old and tender, no further care need be given them, as the growth of the wood will cause them to tear as it expands.

As the grafting season is at hand, we recommend this plan to amateurs and cultivators as one that will give them every satisfaction, and set aside the annoyance of waxed or clayey hands, which they have formerly experienced in their grafting operations. —

* * *

## The Vegetable Garden.

The extreme coldness and inclemency of the month just passed, prevented much of the preparation usually entered into in February for Vegetable Gardens. This delay renders it highly important that this work should now be attended to in good earnest. As is remarked by the Southern Cultivator, in order to secure a regular and abundant supply of good vegetables, the garden must be put in a thorough condition at once.—Let it, however, be remembered that the soil should never be stirred, or any seed planted while the ground is wet; in fact, it must be dry enough to crumble when raked over.

English *Peas* that are up, may now have a careful hoeing, drawing a good ridge of soil to them, particularly on the northern side.

All vegetable seeds, except Cucumbers and Musk Mellons, must be planted this month, as *Beets, Spinage, Parsnips, Salsify, Lettuce, Turnips, Onions,* (black seed) *Cabbage* for succession, &c.

During the latter part of the month; *Cabbage plants* may be set out for a crop.

*Okra* seed may be planted; if put in rather deeply, say covered with a couple of inches of soil. it will be safe and ready to start as soon as the season will permit. Plant *Irish Potatoes*, and if any of the former planting have come up, hoe and draw the soil up, so as to cover them completely, and they will soon appear, again.

By the middle of the month, *Water Melons* and small crop early *Corn* may be put in *Adams' Early* and *White Flint Corn* are the best varieties.

Now is also the time to sow *Colza* seed. We have often planted the seed, during the first week of February, and had excellent greens in four weeks.

Where *Sweet Potatoes* are wanted early in the summer, put out your sets in a hot bed that you may have an abundance of draws to set out by the first of April.

* * *

## North Carolina Wheat.

We publish the following letter from the Commissioner of Patents to the Hon. John A. Gilmer, with the hope that it may meet the eye of the person alluded to in the Commissioner's letter:

U. S. Patent Office,
February 19, 1858.

Sir:—A few months ago, a gentleman from your State sent or left at this office a sample of beautiful White Wheat, said to have been taken from a parcel of some two hundred bushels, raised by him the past season.

If you can ascertain who this person is you will oblige me by favoring me with his address.

Yours, very respectfully,
J. HOLT,
Commissioner.

* * *

Important to Farmers.—We have a farmer friend in Albemarle, says Richmond *South*, who had a fine sheep to die a few days since under the circumstances that excited his curiosity to find out the cause of his death.—A post mortem examination resulted in the discovery of five good size quartz pebbles in the stomach, ranging in size from a marble to nearly the size of a partridge egg, and weighing in the aggregate two and a hal ounces. These stones were evidently the cause of the death of the sheep. How go they into his stomach? is the question.—Our friend, who has been in the habit o alting his sheep upon rocky land, thinks it robably swallowed the pebbles to which alt had adhered. If so, says the Charlottesille *Advocate*, it would be well for our farmrs to be particular where they salt their heep.

◆

*For the N. C. Planter.*

## Oh, Never leave the Old North State!

BY W. E. WYCHE.

he wind blows gently on her coast,
And softly waves the long-leaf pine;
er seamen are her country's boast,
Who bravely stem the surging brine.
Oh, never leave the old North State
For a home in the distant west;
'Tis mapped off in the book of fate
Towering high, among the best!

afe, crowded ports take many a sail,
To waft her products o'er the deep:
old Capes make daring sailors quail—
High on their shoals the breakers sweep!
Oh, never leave the old North State, &c.

here's terror in the fresh'ning gale,
When "breakers ahead" fall on the ear;
hen loud winds swell the spreading sail,
They startle with appalling fear!
Oh, never leave the old North State, &c.

ere, fruits of almost every clime—
Fanned by the genial summer's breeze,
ip'ning from spring to winter time,
Hang clust'ring on the thriving trees.
Oh. never leave the old North State, &c.

he yellowing fields of standing grain,
Move, waving, like the rolling sea;
he dark blue cloud, and falling rain,
Give splendor to the verdant lea.
Oh, never leave the Old North State, &c.

he mock bird chants amid the groves—
Sings sweetly all his varied strains,
he wild deer o'er the forest roves—
Finds pasture on the fertile plains.
Oh, never leave the old North State, &c.

The cattle upon a thousand hills,"
The snowy flocks, and ranging swine:
he mountains high, and winding rills,
Remind of ancient Palestine.
Oh, never leave the old North State, &c.
Echo Forest, Feb. 1858.

# FOR THE LADIES.

The following article is from a gentleman in this city, extensively engaged in the cultivation of Flowers, Evergreens, Fruits, &c., and his remarks may therefore be confidently received as coming from one "competent to teach" in this Department. Mr. Hamilton is an experienced practical Gardener, whose services can be procured in any of the departments pertaining to his profession, by application to him at Raleigh. We thank him for his contribution, and would be glad to hear from him every month.—*Eds. N. C. Planter.*

*For the North Craolina Planter.*

## Floriculture.

OPERATIONS FOR THE MONTH.

Roses, if not already pruned, should now be attended to. All dead wood should be removed, and when too thick, the branches may be thinned out, which will improve the health of the plant and size of the flowers; the earth around them forked deeply, and a quantity of decayed manure boxed in.

Box and other edgings may now be trimmed with safety: also, vines and creepers be trained to whatever shape desired.

ANNUALS.—A few of the most tender and rare should be sown on a hot bed or sheltered situation, for transplanting as soon as all danger of frost is over. About the middle of the month the first general sowing may be made; say take twelve varieties, arrange the colors as you wish, sow them in small circles, at equal distances on the flower borders; if the colors are nicely arranged the effect will be very pretty. The earth cannot be too rich for them, providing it is well mixed.

RECEDA ODORATA, OR MIGNONETTE.—The earth for this plant should be two-thirds top earth or leaf mould, the remainder clear sharp sand, as the odor of this plant is much stronger than when cultivated in ordinary soil, and the growth much better.

**Dahlias.**—Rocts that were taken up in the fall should now be set to work, separated and prepared for planting.

**Fuschias.**—This is a beautiful tribe of plants, and is nearly hardy, in fact will stand more frost than many plants cultivated in our Flower Gardens. As soon as the frost has cut down the season's growth, cut the stems off close to the ground and cover the root with leaves about one foot thick, throwing a spade full of earth to them to prevent the wind blowing them away. They will start from the root again in the spring, being, strictly speaking, herbaceous plants and of beautiful habit.

WM. H. HAMILTON, Florist.
Raleigh, Feb. 25, 1858.

◆

## Education in North Carolina.

The following statistical infomation in regard to the progress of Education in this State, we compile from the Fayettevile *Observer*. It will be seen that North Carolina is clearly ahead of all the other slave holding States with her system of public instruction; while she compares favorably in several respects with some of the New England and North Western States.

North Carolina has a larger School fund than Maine, or New Hampshire, or New Jersey, (by $600,000) or Massachusetts, (by $500,000) or Georgia, (by $1,700,000; she has as many colleges as Georgia, more academies by 100, and 2000 more common schools, the two States being equal in white population; she has more colleges than South Carolina, more academies by 100, and nearly three times as many children at school.

Virginia has 340,000 white population more than North Carolina; yet the latter has quite as many colleges as the former; as many academies, and five or six hundred more common schools. These comparisons speak volumes in favor of the "Old North State," considering that she has no large cities like the above States to build up and sustain her educational institutions.—*Wil. Herald.*

# MECHANICAL.

## North Carolina Mechanics.

It gives us especial pleasure to notice the enterprise, skill and ingenuity of any of our North Carolina Mechanics; and will take great pride in laying such matters before our readers, whenever put in possession of the facts.

And in this connection we would inform our readers that Messrs. Williams & Harp, of this City, have erected an extensive Spoke, Rim and Hub Manufactory—run by steam—at which they are making these articles out of the best wood, in superior style, and on as good terms as they can be purchased north. We hope the Carriage and Wagon manufacturers of the State will patronize this establishment, and thus furnish an exemplification of their own motto—"encourage home manufactures."

We learn from the Wilson Ledger, that Mr. Henry Barnes, of that place (Wilson, N. C.) has received letters patent awarding to him the right to an invention of a single trigger to the double barrel gun, by which both barrels can be fired together or separately.

Also that Mr. C. P. Kenyon, of the same place, has invented a self-coupler to the Railroad car, which is intended to supercede the labor and great danger attending the coupling by hand. Mr. Kenyon, we learn, has also placed a model of his improvement in the patent office with the view of securing a patent.

Also, Mr. T. F. Christman, also of Wilson, a worthy citizen and intelligent machinist has on exhibition on the Court-house squar in that Town a model of a marl and wate Elevator, invented by himself. The Elevato works admirably and is adapted to takin the marl and water from the surface or pi at any reasonable depth. With two hand to propel it, thirty half bushels of marl, o forty-five of water can be elevated in a minute. Six hands may be profitably employed and the more hands the more profitable.

The Elevator will load three carts a minute, and by attaching the perpetual apron, the marl may be taken to any point and deposited in any quantity desired.

We bespeak for Mr. Christman's improvement a wide and extensive patronage among the Eastern planters of North Carolina where marl abounds plentifully. With the perpetual apron, mud, muck, peat, &c., we doubt not, may be taken to any reasonable distance and deposited as desired. The attention of planters is particularly invited to this important and labor-saving improvement.

## Weeding Hoes.

Mr. Wesley A. Coe, an ingenious and worthy mechanic of this county, is manufacturing an excellent hoe for gardening and farming purposes, and we would advise all who have use for such an article, to give his work a trial. We learn that Mr. C., will keep on deposit in some of the stores of this place a supply of his work, and that his prices are very low, considering the superior quality of the article.

Whenever our people encourage home industry and home enterprise, stimulating the production at home of every article of necessity or luxury in use among us, then, and not till then will ours be an independent and prosperous community. The money that is now sent abroad to purchase articles which could be profitably produced here, if retained among us, would ever prevent such monetary panics as we are now experiencing; besides, our experience is, that it is generally cheaper, in the end, though the price be more, to purchase at home.—*Greensboro' Patriot.*

**Mortar.**—The ancients made a kind of mortar so very hard and binding that it is now found to be almost impossible to separate the parts of some of their buildings. The lime used in these harder mortars is said to have been prepared in those early days from the very hardest stones, sometimes from marble. Fine sand makes weak, and coarse sand strong mortars, and the sand should be washed before mixing, to obtain the large grains. The lime should be thoroughly burned, and perfectly white. The principle upon which it hardens is that the lime absorbs carbonic acid from the air, and hardens, forming a concrete around the grains of sand.—It was customary to mix with the lime and sand chopped straw; but cow's hair has been substituted; this is only introduced to cause it to bind together, and prevent cracking in the drying.—It is only used for the prime coat.

**Strength of Metal.**—In some experiments made for testing the comparative strength of plain and corrugated metal, the superiority of the latter was significantly demonstrated.—Two pieces of copper, of equal surface and thickness, were formed in arches of about fifteen inches in length, the one having a flat surface, and the other two corrugated arches. The arch with the flat surface gave way under a few pounds, while the corrugated arch withstood the weight of two men who violently surged upon it without making the least impression. In another experiment, made upon a large scale, and under unequal conditions, the plain arch gave way with three thousand one hundred and twenty six pounds of pig iron upon its crown, while the corrugated arch bore the weight of sixteen thousand nine hundred and ninety four pounds of the same metal for forty-eight hours without the least percetible deflection.—This was afterwards increased to twenty seven thousand pounds, which also remained forty-eight hours with no visible deflection.

**To Cut Glass with a Piece of Iron.**—Draw with a pencil on paper any pattern to which you would have the glass conform; place the pattern under the glass, holding both together in the left hand, (for the glass must not rest on any plane surface,) then take a common spike or some similar piece of iron, heat the point of it to redness, and apply it to the edge of the glass; draw the iron slowly forward, and the edge of the glass will immediately crack; continue moving the iron slowly over the glass, tracing the pattern, and the clink in the glass will follow at the distance of about half an inch, in every direction, according to the motion of the iron. It may sometimes be found requisite, however, especially in forming corners, to apply a wet finger to the opposite side of the glass. Tumblers and other glasses may be cut or divided very fancifully by similar means. The iron must be heated as often as the crevice in the glass ceases to flow.—*Scientific Mechanic.*

### Kettlewell's Compounds.

The Charleston *Mercury* advises planters to a liberal use of the best paying manures, and mentions that Kettlewell's Compounds, amongst others, have achieved a high reputation, are cheap, and can be bought upon a credit of four months. It also mentions that the sale in that city the last year, was five hundred tons. This would seem to argue an increased and increasing popularity of these Compounds, and although we have but little practical knowledge of their value and adaptation, we think that our planters would but be keeping pace with the Agricultural advancements of the day, to test, experimentally, their quality and virtues. We are rapidly hastening to an advanced state of improvement in everything, which tends to easy development of all the advantageous qualities both of mind and matter, and he who would not be left behind in the great race of life, must not turn a listless ear to, or remain personally unconcerned in regard to what is transpiring around him. Our planters greatly need the benefits to be derived from an advanced and improved system of Agriculture, and should avail themselves of all the lights thrown upon the subject through the mediums of genius, science and discovery.

"THE SPIRIT OF THE AGE,"

**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*

100.000

**CHOICE FRUIT TREES FOR SALE,**

**BY WESTBROOK & CO.,**

AT THE

**West Green Nurseries and Gardens,**

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

**30 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

A. Lenoir

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., APRIL, 1858. NO. 4.

**THE NORTH CAROLINA PLANTER,**

Is published monthly, in Raleigh, N. C., at ONE DOLLAR A YEAR, ☞ *payable invariably in advance.* ☜ From this rule there will be no deviation.

No copy will be sent unless the cash accompanies the order; and it will be promptly discontinued at the close of the subscription year, unless the money is forwarded for renewal.

Gentlemen of ability and experience will conduct the PLANTER. All communications to be addressed to A. M. GORMAN, Publisher. Raleigh, N. C.

[Correspondence of the N. C. Planter.]

MR. EDITOR: I have to acknowledge the receipt of the two first No's. of your valuable N. C. Planter, and take this opportunity to express my anxious desire for its success. And now that our people seem disposed to rest a little from political strife, may we not hope to help improve our *farms* awhile, and make North Carolina a good place to move TO, instead of "*from.*"

I see in the February No. an article of inquiry as to the effect of "bitter mast" upon hogs; and another in the same No. "Hogs vs. Dogs." To the last named one, let me say, that my fondness for rural pursuits in life, some little taste for *old ham*, to say nothing of my admiration for my *lard* and *bacon*, incline me to be a strong partizan "hog man." I had occasion to allude to the same subject a short time since, in this wise: Some of my neighbors called in to witness the weighing of two hogs, which, by the way, amounted to gross, something over One Thousand Pounds. I informed them that those two hogs were made of what was almost universally fed to dogs. The pigs were taken, say a month or two old, kept a year upon kitchen slop and a very little corn fed to them shortly before killing. Thus, at about fourteen months old, you may have two hogs worth $65, less the $5 that the pigs were worth when put up; leaving you per annum $60 worth of pork, which I will almost guarantee in every case, over and above what is ordinarily grown on the farm. And this $60 is generally the *per annum* cost of keeping dogs that are at least useless.

While on this subject, let me answer the inquiry of the first article alluded to. An effective preventative of the consequences of the "bitter mast" upon hogs, and one I have used with great success for a dozen years, and therefore speak from experience: Just have you a fence well built and kept up carefully between the hogs and the "bitter mast," taking care that the hogs are inside the field and the bitter mast outside; in other words as the Irishman said, "have a *bit* of a place to put your pigs" in.

Respectfully yours,
BUNCOMBE.

We should be pleased to hear from our friend on the other matters referred to in his private note to us.—EDS. PLANTER.

*From the Cotton Planter and Soil.*

## Improvement of Worn Out Land and Blackberry Wine Making.

DR. CLOUD.—What do old fields of Middle Georgia and Alabama produce when turned out? You would of course answer, Broomsedge, Persimmon and Sassafras bushes and Blackberry briars. Do these natural productions improve the soil? I would say not, except the briar, which is the only one of these articles of growth that do improve the soil, the other three poison and destroy the value of the land? Why then do not Farmers sow down broadcast or plant in hills or drill. Their washed off hill sides, or whole fields of land that they design to rest in briars, one bushel of Blackberry seed, mixed with twenty bushels of oats would sow down 20 or 25 acres of land broadcast, or 40 acres in drill 4 ft. apart. The oats sowed would pay for the labor of doing this work in two years more; there could be raised from the Blackberry a better wine and a surer crop than can be raised from the Grape, and a perpetual hog pasture made of the fields at a small cost, the Broomsedge, Persimmon and Sassafras bushes extracted from growing, and a more permanent improvement made in the soil in five years, than can be made by any any other system of double the cost. My neighbor D. H. is fond of experiments and has the land suitable and I feel I must urge him to the work as his industry and perseverance in planting as well as in wine making will insure success.

A PLANTER.

*From the Southern Farmer.*

## Experiments in the Culture of Irish Potatoes.

MESSRS. EDITORS:—As it is now the season for Irish potato planting, I send you the result of an experiment made by me last year. After having previously well plowed the land in the winter, designed for this purpose, I laid off the lot, running a two horse turn plow, opening a furrow as deeply as I could sink the plow, 4 feet apart. The rows throughout the patch were 75 yards in length, and planted on the 1st day of April, at the usual distance apart in rows—say about 10 inches. Three rows through the patch were appropriated to this experiment, to the first of which I applied one horse cart load of hen manure, and put the potato on the top of the manure; to the second I applied the same quantity of the same kind of manure, and mixed it in with the earth by running the shovel plow as deeply along the row as one horse could pull it; then put in the potatoes; in the third row I run the shovel plow as before, and put in the potatoes, covering them about 5 inches thick with well rotted stable manure, and then covered all, (as the rest of the rows were,) with a one horse turn plow. These were all planted with the yellow potato.

On the 15th of April I planted a row of the same patch in pink eyes, applying Peruvian guano at the rate of about 400 pounds per acre, first chopping in the guano well with the grubbing hoes, then planted the potatoes and covered with the hoes.

The first three rows were dug and measured about the 1st of September; the last, or that planted with pink eyes was dug about ten or or fifteen days later, and yielded as follows:

1st row 3 bushels.
2d " 2¾ "
3d " 4½ "
4th " 4 "

I would here state that they all received the same work, and those rows to which the hen manure was applied produced potatoes large enough for the table two weeks earlier than any other portion of the patch.

If you think this of any value, you can use it as you please.

Respectfully,
JOHN BATTE.
Farmingdale, March 2, 1858.

## A Word to Farmers.

"There," said a friend of ours a few days since, while we were walking over his farm together, 'you see that I am well situated for a farm: there is my tillage land on that mellow and fine ridge, the low-land near the woods is just what I want for a pasture, and that level field across the road is my mowing; everything is divided off just as I want it.' Yes, yes, mowing, tillage, and pasturing, all divided out—well, we are quite sorry for it, and told our friend so at the time, who no doubt, thought us self-conceited, or in ill humor. Kind reader, you may depend upon it, we were neither, as you shall see when we explain. Our friend in selecting portions of his farm for certain purposes—the raising of different crops, committed a very great blunder, and the worst of it is, that thousands do the same. Now, the fact is, and we must all learn its truth sooner or later, or never arrive at the perfection of good farmers; that every rod of earth on a farm should in turn be tillage, mowing, and pasturing, and during the change, treated really and completely as such. This idea of dividing a farm off into mowing, etc., should be done away, and the quicker the better. We should commence a regular system of rotation in crops. In Scotland, the system of alternating crops has been fully tested, and is universally practiced. No man would be considered capable of conducting a farm who should pursue any other method; they have reduced it to a science, and can inform you what rotation is necessary on the different soils. Besides, the fact of its being tested there by actual experiment, every farmer in this country may easily satisfy himself of its utility by a little practice, and every one may see the reasonableness of the measure who will consent to examine it. That the rains will penetrate more readily, grounds which have been loosened by the plow and pulverized by tillage, than the closely matted hard wiry sward, all can see; and that grass will grow better in clean well prepared ground, than the hard trodden pasture, is equally clear. The grass roots and vegetable matter are a support and assistance to tillage crops and thus a change goes on for the mutual benefit of present and succeeding crops.—

Never then, if you believe a word we say, never divide your farm permanently into tillage, etc. any more than you would divide your family, making one eat corn, another wheat, another rye, and another potatoes. Give all a fair chance and they will give you in return until your heart shall dance for joy.—*Southern Homestead.*

---

*From the Cotton Planter and Soil.*

## Blue Grass Culture.

Dr. Cloud—*Dear Sir:*—I avail myself of the earliest opportunity, to give you my limited experience, with that of some of my neighbors, in the cultivation of blue grass, as requested in a late number of the Cotton Planter and Soil.

My first experiment was made some ten or twelve years ago, on a piece of woodland, some twenty acres in extent, with the undergrowth cleared off.—The land was imperfectly plowed, and sown with blue and orchard grasses, about one and a-half bushels per acre. The proportions were, two of blue grass and one of orchard grass. The seeds were covered with a bush.—Time of sowing, early in February.—The original stand was very imperfect, and especially in the spots which were driest, lightest and least protected by shade. It has however, continued to improve to this present time, when a large portion of the area is well set with grass and affords a valuable pasturage. The portions not having a stand are those most exposed to the sun and the depredations of poultry, nearest the houses. The soil is a rich, tenacious, clayey, calcareous loam.

The second experiment was made some five years ago, on a piece of land about the same in extent and quality of soil with the first, two thirds of it with shade trees, and the balance without. The shaded part of this has a luxuriant crop of grass on it and on the other no stand was obtained.

Last spring, I sowed thirty bushels of blue and orchard grass seeds, on a piece of rich, slough lands in the woods, without any preparation, but clearing off the surface of the land well. I had been informed that this method was sometimes successfully practiced in Kentucky. The seed come up badly, but whether because from the late sowing and the dry weather which followed, or from not being covered, it has not been decided. The result however, has determined me hereafter to sow earlier and to plow the land preparatory to putting on the seed, when the land and weather will permit.—The seed should be put on the first or second week of February. The fall is a good time for sowing, but it should be done then by the middle of October at farthest—when sown later, the young grass is liable to get killed by the winter freezes. September is the best fall month for this work. There are, however, two objections to fall sowing: One is, that it is a very busy period, and another that our weather is often so dry at that season, that seed sown as early as September may not get rain to bring them up before November.

I have ordered from Louisville forty bushels of blue and orchard grass seed for spring sowing, and twenty bushels of clover seed, the latter for improving land. My opinion long has been that our black land plantations should have every acre of their forest in grass, where it can be successfully grown.

The foregoing experiments have been made on the black or lime land, but I am convinced from trials made in my grove near Greensboro, that grasses may be successfully grown in the sandy land, in a mellow clayey loam, if protected by shade.

Mr. T. M. Johnson of this place, a very successful and enterprising planter and an admirable manager, informs me that he had sown some forty or fifty acres of black land in the woods, which has been set in blue, orchard and herds grass, for a dozen years or more, and furnishes him valuable grazing for stock of all kinds without any perceptible deterioration.

Col. Wm. Kerr, also of Greensboro, is successfully growing the blue grass on black slough land with woods.

It would seem to be a legitimate deduction from the above facts, that in our hot, dry climate, shade is a necessity for the blue grass as well as many other artificial grasses, and the sloughs, bottoms, deep stiff uplands of our canebrake and lime soils, are the most favorable localities for their growth.

Mr. Johnson's experience satisfactorily proves, that these grasses succeed well on good black land-knolls. At the same time, it is not pretended to be devised that these grasses may be advantageously cultivated in all other soils, etc. Even in England, the land of grasses, where two thirds of the arable area is in meadow, and where every hill, valley and peak is carpeted with a turf of enlivening verdure, they will tell you that the Poa compressed and the Poa pratensis, (large and small blue grass) requires a rich, deep, moist soil. They are both properly meadow grasses. But the knowledge, enterprise and energy of the Anglo-Saxon, where the inducement is strong enough, can exalt the valley and bring down the high places, reverse their conditions and adapt them to new uses and purposes.—There is scarcely any more valuable purpose, let me say in conclusion, for which the high moral and intellectual qualities of our countrymen can be more profitably exerted, than by reforming our agriculture, by substituting to a large extent, the use and cultivation of grasses for the universal grain and cotton culture.

Yours truly,

I. Croom.

*From the Christian Sun.*

## Gapes in Chickens.

Mr. Editor:—The gapes in chickens, is occasioned by a collection of small worms in the windpipe, and unless removed will kill the chicken.—I give you my plan of curing them, hoping that it may be tried by others as well as myself, who have been greatly annoyed by this troublesome disease.

Take a stiff hair from the mane or tail of a horse, double it and twist the two ends together; open the mouth of the chicken and force the twisted hair down the windpipe to the depth of two or three inches, according to the size of the chicken, holding the two ends of the hair securely; when it has been forced sufficiently deep, give it a twist and draw it out gradually, and the worms will come with it. I have taken 20 or more worms from one chicken. Continue the operation until all are removed. I have never failed to free the windpipe of worms in this way. This receipt I consider of great value.

A Housewife.

In agriculture it was once the practice to take ancient customs as an infallible guide; nothing was then doubted, nothing investigated, and consequently nothing improved. Now, it is the principle to do nothing without a reason—everything, therefore, is investigated, and consequently, everything is improved.—Ex.

*From the Southern Planter.*

### Lime Applied in Small Quantities to the Red Lands of Madison County.

We are much indebted to the author for the following answer to a letter we had writen him, asking information in regard to the application of lime to wheat in small quantities. The information he gives is very valuable.—Will he be kind enough this spring to make an experiment of lime without the addition of plaster. It will go far to verify the accuracy of his conclusions.—ED. SOUTHERN PLANTER.

MADISON COUNTY,
Jan. 23d, 1858.

*Dear Sir:*—Yours of December last came to hand after some three weeks delay, requesting me to inform you of the results of my experiments with lime on wheat according to the plan suggested in the Southern Planter. I will now endeavour to give you the effects of my experiments; although I have not seen the plan refered to. In this, our section of the country, the wheat crop had become almost an entire failure from the effects of joint-worm. In the winter of 1855, I determined to try a top dressing of lime and plaster on my crop of wheat, (though small,) in the spring of that year. As my force was small, it became necessary that I should place the lime in the fields before begining to spread it, which I did in the lump or stone, and covered it with dirt to keep it from blowing off, as ours is a very windy country at that season generally. I then commenced spreading the lime about the last of April on a field of about 25 acres oat and wheat stubble fallow, slacking the lime as it was needed for use, at the rate of 4 bushels of lime and three-fourths plaster per acre (with one of J. W. Faulks' guano and lime spreaders.) The land was very stumpy, and of course the lime was irregularly applied. That field yielded, at harvest, from 10 to 20 bushels per acre of very nice, heavy wheat, whilst similar land in my neighborhood gave only some 3 or 6 bushels per acre without the use of lime.

In the spring of 1856 I failed to get lime: consequently I could not apply it, though I had seeded the same field in wheat except about 5 acres, which was seeded in clover with the application of about one bushel plaster per acre. On the wheat that spring, the crop was not quite so good, yielding from 9 to 10 bushels per acre. In the fall of the same year, I seeded that land again, (stubble fallow.) Last winter, you will recollect, was a very hard one, except the latter part of February, which was quite mild, and the wheat began to grow and look very well, though mine was very late. The month of March was very cold, and killed out a great quantity of wheat in this section; our wheat fields were naked until the first of May.—The prospect was so gloomy that one of my neighbours, in walking through the field with me, said he would not give the seed for what it would make. You can judge it was a poor prospect when I tell you we had to examine very closely to find the live roots. I applied about 10 bushels of slaked lime, and about two bushels of plaster per acre from the 15th to the 25th of April. About the middle of May my wheat began to hide the ground, whilst most of the fields in this section were quite naked; in fact all were except good low grounds. I harvested a very nice crop under the circumstances, (it being the fourth crop successively,) supposed to make about 10 bushels per acre, whilst in my neighborhood similar lands made from 3 to 7 bushels per acre. I have now about 8 acres of the same land in wheat again; the balance is seeded in clover.

In 1855 I had another field of about 30 acres, which had been worn out and turned out to the commons as almost worthless before I purchased it, which was the year before (1854,) in time to clean up and plant very late in corn. In the fall of 1854, I seeded it in wheat from about the 20th of October to the 10th of November; in May 1855, I put about 8 bushels of slaked lime, and 1 bushel of plaster per acre, at that time the ground was almost completely naked, I did not expect to get more than my seed; there came a gentle rain in a few days and the wheat soon began to hide the ground. About the 20th inst., I sowed my clover seed at the rate of 1 bushel to 8 or 10 acres; at harvest, which was July, there was a very pretty crop of straw for the land, (taking into consideration the poor prospect in the spring,) and made from five to six bushels of wheat per acre, when similar land in the neighborhood, without the use of lime and plaster, did not make more than three bushels per acre. There was on that land, as poor as it was, the finest stand of clover I ever saw—the growth was so large in August that it could have been cut for hay in many parts of the fiield. I pastured it very hard that fall, and in the spring, 1856, and that summer cut a very heavy crop of hay off; that fall I pastured it very close again, and in the spring of 1857, repeated the plaster at about the same rate. In April I put three calves on it, and kept them there until cutting hay time, and then cut a heavier crop off than the year before. That field has now a fine clover sod.

It is proper to state, however, that the land spoken of is nearly all red clay soil. In addition, I applied lime last May on a piece of sandy low grounds, that I had taken a crop of buckwheat from in 1854, and a crop of corn in 1855 and 1856, each, without the aid of any manures except plaster and ashes, which was simply applied to the plant. The land being thin, of course the crops were light. In the latter part of the month of October and first of November, 1856, I seeded a part of it in wheat, and left the balance for oats, which was seeded in May 1857, and some 4 or 5 bushels of lime applied, and from one to two bushels of plaster per acre. I got from that small field from 7 to 8 bushels of wheat per acre and upwards of 15 of oats, and a very fine stand of clover, which is very unusual on such land in this section.

My opinion is, so far as my observation goes, that lime as a top dresser to wheat and permanent improver, will pay better by applying it in larger quantities. Say some 15 or 20 bushels the first time, and some 25 or 30 the second, and in like proportions afterwards, increasing the quantity every time you apply it on the same lands.

Yours respectfully,
JOHN BOOTON.

P. S.—The reason for guessing at the quantity of wheat for 1857 is, it was destroyed by fire before it was fanned out. J. B.

---

*From the Southern Farmer.*

## Prolific Flock of Sheep.

MESSRS. EDITORS:—In a recent number of the Southern Farmer I saw a piece headed "Extraordinary Fecundity," relating to a cow that had borne two calves within ten months and fourteen days of each other.

That brought to mind my prolific

flock of sheep, consisting of twenty-three ewes and two bucks, which produced me last year within seven months—that is, from the 1st of January to the 1st of August—fifty-one lambs, many of the ewes having twins twice within that period, and one ewe three at a birth. In addition to that, I sold my early lambs at six dollars and fifty cents a head. Let no one say that sheep are unprofitable stock after this, particularly when they are well cared for. PRINCE GEORGE.

◆

*From the Southern Planter.*

## Best Time for Sowing Clover Seed, &c.

MR. PRESIDENT:—In accordance with the requisition made by the Club, I submit the following report upon the best time of sowing clover seed:

At what seemed a very favourable time in February, 1854, I commenced sowing clover seed. Something interfering, I did not finish before the tenth of April. Finding that whereas what was sown in February did not stand at all, what was sown in April stood very well, I concluded in 1855 to try again the relative advantage of seeding at different times. Therfore I seeded part in Feburary, part in March, and part in April. The result was, that although that sown in February was on tobacco lots, that sown in April on old field stood much the best. That sown in February and March was tolerably good. This year I have sown altogether during the first week in April, and now it looks very finely, having come up well. I did nothing to it after sowing. In April I endeavored to select a time when the ground was dry; in the other months when the ground was puffy from freezing and thawing.

I would also report that last year I commenced sowing guano broad cast for tobacco, previous to bedding up the land; but at the suggestion of a neighbor, I abandoned that plan and put the balance in the drill, using equal quantities; the subsequent treatment was the same. I applied about one hundred and fifty pounds at the time of hilling up the tobacco. The result was very greatly in favor of that upon which the guano was sown broad cast,—it being much earlier, larger, and riper.

Respectfully submitted,
THOS. R. BLANDLY.

◆

## Lice on Young Cattle.

Look close into the coats of young cattle now, and let no vermin live on their necks and backs. It is an easy matter to kill those lice, and as all lousy cattle come out poor in the spring, it is barbarous to let such small mites as lice have their own way through the winter.

Farmers find out in the spring that their calves are poor and lousy, and they make a stir for a remedy.

Any greasy matter, well rubbed in will kill these lice. Ashes sifted on their backs will do it. Yellow snuff costs but little, and is better than the juice of tobacco. Fine sand sifted on them will drive off lice; the only objection to sand is that it causes an itching on old cattle in the spring.

*Ploughman.*

◆

WILL UNDERDRAINING PAY?—This depends on circumstances. If good naturally underdrained land can be obtained in your neighborhood for from $15 to $20 per acre, it would not pay in all probability to expend $30 per acre in underdraining low, wet or springy land; but in all districts where land is worth $50 per acre, nothing can pay better than to expend from $20 to $30 per acre in judicious underdraining. The labor of cultivation is much reduced, while the produce is generally increased one-half, and is not unfrequently doubled; *and it must be remembered that the increase is net profit!* If we get $15 worth of wheat from one acre, and $20 worth from the other, and the expense of cultivation is $10 in both cases, the profit from the one is twice as much as from the other.

*Genesee Farmer.*

*From the Southern Planter.*

## Orchard Grass.

As this is near the season for sowing this most useful grass seed, I will furnish you, Mr. Editor, with a few facts relative to its great advantages for cattle, and its yield of seed per acre. In this climate and section of the valley it is the earliest by a month at least; the last to be injured by the winter, and unless pastured too closely in the fall, affording much green food the entire winter.

The quantity of seed obtained per acre from a good and well set field or lot, is often very great. I have repeatedly known fifty bushels per acre saved, and then a respectable crop of hay cut. As to the permanence of the grass, I will mention a statement made to the Farmer's Club of this county, by a member, obtained from my friend, the Rev. Mr. Allemong, of Newton. His lot has been in this grass thirty-four years, and has averaged during that time more than thirty-five bushels of seed per acre.—I see no deterioration now in its stand. A moderate crop of hay has always been cut after securing the seed. It is not equal to Timothy for hay, in weight or nutriment, I think; but I am confident that a lot of ten acres properly seeded, will afford more food for all kinds of stock in its product of hay and subsequent growth of grass, than any other now known. The hay should be cut early in June. When intended for seed it should remain longer, and after that is secured, should be mowed immediately for hay, or left for fall or winter grazing. It should be sown about the usual time of clover seed on the wheat land, or with the oat crop, which is better.—Two bushels per acre should be sown in order to secure a good crop, if it is wished to save the seed. The seed is very low at present, and can be furnished in Baltimore or Strasburg by "Allemong & Son," of Newton, in this county, at about $1.20 per bushel.

FREDERICK.

Be Systematic.—Here we have one of the first principles of successful agriculture. Let all your transactions be conducted in a business-like manner. Take note of every operation, whether you buy or sell, receive or disburse, sow or reap, make a promise or a bargain. To do this, it will be necessary to keep a diary, and we would say, do so, if for no other object than a ready means of comparison.

Study your Profession.—It is not alone the energy that wields the spade or holds the plow that insures success. There is a "higher law," the culture of the mind, and it must go hand in hand with the culture of the soil.—The relations of science to the farmers are intimate. Good books are aids in the attainment of knowledge, but never pin your faith on the *ipse dixit* of any individual—think, experiment and judge for yourself.

The farmers life is one of experimenting.

## How a Thriftless Farmer was Reformed.

If you have a place for everything, and keep it in its place, if you have a time to do business, and to do it in its time, you will find that you will "drive business" instead of business driving you, and so will have leisure instead of constant worry. It pains me to see some men undertake any business of moment. They are as sure to become entangled, and thrown on their backs, their business a-top of them, as they are to undertake it. Take farming for instance. Now I venture the assertion that two thirds of all the farmers in this State are burning green wood this terrible cold weather. Go into their houses, and you hear the sissing of the beech, or maple, or elm, as like to the death-dirge of a cockroach as can be. Out of the chimney tops comes forth smoke as dark as Tartarus, and their wives and hired girls are cross as bedlam. These men could not find time to cut their wood and have it seasoned. Now I charge it on you, that you fail not *to do* all that you undertake—*in order*. Every day accidents, casualties, catastrophies, providences are taking place, because men, women and children have not time to do things as they *ought to be done*. I must tell you a story—which is a *fact*. When I was a boy, there lived in my native village a family by the name of Wilson. There were four boys and four girls, and they were exceedingly gifted. Not one of them was there who did not rank in beauty, intellect and personal physical power a good way above mediocrity. They all had more than common educational acquirements, for they learned easily. The girls all married early, and to men of high promise. The men all married and to respectable women. Yet all remained poor.—Their failure was directly attributable to a *want of order*. Not one of them was ever known to do a thing in its time, nor having anything in its place—with one exception, and he is the hero of my story. Of one of the girls I may say truthfully that for over thirty-five years she has *never seen the sun rise*, always going to bed past midnight and rising past midday. But to my story. Erastus Wilson was a farmer—a shiftless, slovenly, disorderly, slip-shod farmer. The winds and the waters, the sun and rain, darkness and broad-day, all conspired to do him harm. His gates were unhung, his hogs' noses were unwrung, his sheep could leap his fences like wild deer, his cattle were seen with boards over their eyes, great spiked chains on their necks, yokes on, and "tied head and foot." His horses were as thin as a Rhode Island spare rib—you could see sunrise through them. His windows had old hats, old coats, old newspapers, and shingles, instead of glass. His corn was stunted, his meadows half covered with grass, and around and about him the spirit of decay seemed to brood. Yet he worked hard, did not drink, nor gamble, nor quarrel. In fact, he was a pious man, but he did everything in the wrong time and in the wrong way.

Thus he lived until his hair turned *gray*, and poverty sat at his table an acknowledged member of his family. One cold December day he was going to his barn, and it happened that he lifted up his eyes, and afar off in one of his lots he saw something to him like deer-horns sticking through the top of a snow-drift. He was all alive. He would make a conquest—so over the fence he leaped and made for the deer. He waded the drifted and undrifted snow till he reached the spot, when, behold! instead of the horns of a buck, there stuck up the *two handles of his plough!* He was very angry, and started to go back, when he said he heard a voice as audibly as ever a voice spake, say, "Erastus Wilson, you deserve a good flogging for leaving your plow out in the snow. It is by such heedlessness you have come to poverty.—Pick up your plow and take it to the barn."

He immediately set about it, and by what means he did it he never could tell. But through that deep snow and over the drifts he dragged the implement to the barn.—Once there he took a raw hide, stripping himself naked, and addressed himself thus

"Erastus Wilson, you are a mean, dirty, poverty-stricken-man. All your long life you have been too lazy to save what you have earned, or too careless to do it. You deserve a flogging. Here is your plow whose handles you could never see, till you thought them the horns of a deer, then you could wade drifts waist deep to get them. You deserve a good flogging, you careless blockhead, and you shall have it," and he laid the raw hide on to his body, legs and feet, till he raised great whales, skipping around the floor naked and screaming, while he would say, "Leave your plow out! will you? Pretty farmer you are, ain't you? I'll see if I cant teach you better." Thus he flogged himself most soundly, dressed himself, and went in. From that flogging he came forth a changed man. He was prompt, orderly, saving and up with the times. His neighbors were surprised. His family was wonderstruck. He began to thrive, and in less than three years, his farm, his flocks and herds all bore the evidence of being under the guidance of a spirit whose energies were of the amplest order.

◆

*From the American Veterinary Journal.*

## Quinsy in Hogs.

PRELIMINARY.

A subscriber located in Jefferson county, Iowa, requests us to "*editorialize*" on the disease known to prevail among swine as "*quinsy.*" This is rather a *poor* text for a veterinary theologian to discourse on; but,—*nil desperandum*,—an *editor* is supposed to know everything—and, therefore, is considered as reliable authority, on all matters pertaining to his calling; in fact, on every other subject; however, the diseases of swine are subjects of great importance to the husbandmen of this country, who are, decidedly the largest owners of this description of property to be found in the civilized world, and we are glad to find that people interested in raising these animals, are endeavoring to inform themselves of the nature and treatment of the various maladies peculiar to swine.

Definition of Quinsy.—Quinsy, or sore throat, is a genus of disease in the class *pyrexiæ*,—(which signifies fever,) and order *phlegmasiæ*—(the plural of inflamation)—topical pain and inflamation.

The technical term for "*quinsy*" is *cynanchæ*, which signifies to *suffocate* or *strangle*. The disease is, sometimes, located on the laryngeal membrane, or it may locate on the *tracheal* tissues; its location does not alter the character of the disease; it evidently consists in plethora, or congestion of the respiratory tissues. This condition of the membranes of the respiratory passages is discovered by a difficulty in swallowing food and fluids; the neck is stiff and the nose protrudes forward; the respiration is accelerated, and the animal is said, "*to breathe quick;*" and occasionally coughs; the salivary glands are tumified; the functions of excretion and secretion are, consequently, impaired, and the animal is said to be "sick as a dog;" the disease often proves fatal in suffocation.

A common *quinsy*, or sore throat, unaccompanied by enlargement of the glandular structures— in the regions of the lower jaw and throat—named, *parotid*, *thyroid*, and *submaxillary*—may generally be cured by housing the animal in a warm "*pen*," giving him a suitable allowance of clean straw to burrow in, and a diet of thin gruel seasoned with a small portion of salt. A teaspoonful of nitre may also be added. It may be necessary to apply a counter irritant to the throat, and in this view we recommend the latter to be rubbed occasionally with a small quantity of tincture of capsicum. If any medicine be needed. which will be indicated by a constipated state of the bowels.—the mildest is the safest, except the animal be very fat, then a good dose of castor oil or epsom salts may be given. If a mild aperient, only be indicated, we should give one ounce of sulpher, and half an ounce of cream of tartar; this may be mixed in a small quantity of molasses and given in the usual way, or if the animal is disposed to feed, it may be incorporated in the food.

The disease sometimes assumes a putrid type; in this case, the throat may be rubbed as above, and an occasional dose of the following must be given:—

| | |
|---|---|
| Tincture of capsicum, . . . | 4 ounces. |
| Honey, . . . . . . . . . | 8 ounces. |

Dose—2 ounces, daily.

It is well known that pure air, comfortable quarters, and good nursing does much towards restoring a sick man or woman to health, and an equal amount of benefit may be expected to result from proper attention to these matters, when that much abused and neglected animal known as a "hog," is placed under our care for veterinary treatment.

PREVENTION IS THE CHEAPER PART OF TREATMENT.—Quinsy owes its origin to the common, or well known causes, which engender a similar disease in the human system, viz., cold, fatigue, miserable accommodations in housing, &c. Proper attention to the feeding and housing of these animals, would do much towards preventing this, and many other diseases incidental to swine. The wretched condition in which some of them are kept, and the vile garbage on which they are compelled to subsist, are matters that should interest the husbandman and command more of his attention.

*From the Germantown Telegraph.*

## An Old Farmer's Experience;

### OR, HOW TO MAKE A POOR FARM RICH, WITHOUT MUCH MONEY EXPENDED.

### CROPS.

*Wheat.*—The best plan to raise a crop of wheat, and prevent the ravages of the Hessian fly, is to take a field well set with clover or timothy. I have been in the practice of plowing clover or oats, as mentioned before, let it lay till the next summer, and pasture it or mow, as the case may be. It should be left entirely at rest, from the beginning of July to the middle of August, without mowing or pasturing. The manure prepared as before directed, should be applied at the rate of fifteen two-horse loads to the acre, spread out of the wagon, as, if put down in heaps among the weeds and grass, it cannot be got at so as to spread it evenly over the ground. If the weather is dry when there is a half a day's plowing covered, plow it in six or seven inches deep; if there is much grass and weeds, apply a chain and draw it under, in order that all may be completely buried, the more the better. Keep the manure plowed under so that it may not get dry, as much of its strength may be lost. Plow in large lands to keep the ground even or level, for that is the beauty of farming, besides being in a better condition to mow when plowed; roll and harrow it well. Just before seed time spread a light coat of short dung, shovelings, &c., or good compost over the ground; sow a bushel and a half of good, clean wheat to the acre, and plow it in, not more than three inches deep; sow four quarts of timothy seed to the acre, and harrow it once lengthwise, and roll it down smooth. If this process is pursued, it must be a very unfavorable season indeed if there is not a fair crop of wheat. The short dung or compost will nourish the wheat and give it a good start in the fall; the other manure and green dressing will be sufficiently rotted by spring, when most needed, to give it a vigorous growth.

I am satisfied after years of experience that there can be no better plan to produce a crop of wheat than this; and where there is a good crop of wheat, you may look for a good crop of grass, and then again you have that fine sod for the growth of a crop of corn.

The Hessian fly is never known to injure wheat late in the fall, or at any time in the spring, if it is in a strong growing state.—If the ground is very dry at the time of breaking up in August, all the better, if you can get the plow through it, particularly if a clayey or heavy soil, as being lumpy at the bottom, it will not settle so tight in winter as to prevent the water from draining off from the roots of the wheat.

I have practiced the foregoing plan of wheat farming and have thereby greatly improved the quality of the land, so that it produced double the quantity of grain and hay that it had done before, and in fifteen years have not lost five bushels by the Hessian fly.

The best time to cut wheat is as soon as the grains have passed the milky state and become filled with a kind of paste; let it lie in swarth till the straw is cured and the grain becomes hard, when it may be taken up and hauled without shocking. It will make more and better flour from the same number of pounds and less waste in gathering, than if it stood till it was quite ripe.

*Rye* is generally an unprofitable crop, and if it were not for the convenience of having the straw to tie up corn fodder, I should advise not sowing any.

*Buckwheat* is somewhat better, but between the last hot sun and the early frost, it often produces but little. It is commonly sowed too thick; a half bushel of good seed on an acre is a great plenty on any land, and will produce a greater crop than if more seed is used.

*Grass.* All means should be used to promote the growth of grass for hay and pasture. The natural grasses of the fields are better than the cultivated, but the bulk is too small, and resort must be had to other kinds. Of these, timothy and red clover are the best.—If timothy is sown alone, it should be done early in August, four quarts to the acre; it will be better to mix flat turnip seed with it, harrow in, and roll. If sown on wheat, it should be harrowed in with it. There is no danger of the wheat being injured in the spring by this process. If the wheat is there, it starts sooner and out-grows the timothy; but if it is not there, the timothy will sometimes make a tolerable crop.

Clover seed should be sowed on the wheat, as early in March as the ground will bear to walk on, about four quarts to the acre. Clover should not be pastured the first season; but when the growing season is near over, the stubble field should be mowed, and the crop, when cured, should be housed and fed out at the barn to the dry cattle through the winter. Sow one bushel of plaster early in the spring; and when two-thirds of the clover heads are turned brownish, it is in the best state to be cut. The second crop is worth but little for hay; it is better to let it stand till the seed is ripe, and gather it for seed.

If timothy is to be cut for hay, let it stand till the seed has got its growth, and the blades near the ground are dead, it will make more and better hay, with less trouble cut in that state than any other.

Top-dressing with good, short manure early in the spring, is the best plan to keep grass land in a productive state. Sometimes great benefit has been derived from spreading lime over it early in the spring; when this is done, the lime should be slacked and spread immediately, from twenty to forty bushels to the acre.

No man will ever make a good farmer who trusts for his knowledge to the opinions of others. His knowledge must be the result of his own experience and observation; and any plan or opinion, come from where it may, that will not bear the test, may very safely be doubted.

Among these fallacious notions, is that which disapproves of selling hay off of a farm, as being injurious to the land. I have tried it, and saw others practice it, and in no instance to the injury of the land. If there is a stock of four horses and five cows kept the year round on eighty acres, and as many dry cattle through the winter as is needful to work up the coarse fodder, and there is any good hay, more than is needed for the above stock, let it be sold, and buy lime with part of the money and pocket the rest. If the land is well set with grass, and a proper course of farming pursued, there will be a surplus of hay every year for market, and the land improving at the same time; bnt if not well in with grass. just the reverse is going on. It is a great deal better for the land to sell three loads of hay off it, than to buy one to bring on, and feed to the stock. If there is hay to spare to sell, we may take it for granted that the creatures get enough to eat; but if it runs out and must be bought, it is equally certain that they do not get enough, and are in a starving or unprofitable condition, and that the land is not set with grass as it should be.

The next essay will be on Cutting Fencing Timber and Making Fence.

A PRACTICAL FARMER.

23 Ward, Phila., 2d Mo. 20, 1858.

*From the S. C. Farmer and Planter.*

## Report on Corn and Oats.

*To the Executive Committee of the State Agricultural Society:*

GENTLEMEN.—As a competitor for the largest yield from one acre of ground, I herewith present the certificate of the Committee, and Mr. Veal's certificate of the quantity of land. Also a report on the culture of the crop, quantity of seed, manure used, &c.

The lot of ground was the same which last year produced 116 bushels of corn—a sand hill flat. About the last of January the ground was well plowed with Glaze's large iron plow, drawn by two strong mules. 150 pounds guano, and about the same quantity of plaster was spread, and two bushels of oats sowed, harrowed in and rolled. About the first of March the roller was again used. On the 30th of June, the oat crop was harvested.

The lot was immediately plowed, as at first, and harrowed (all stubble was removed to the cow yard;) it was then laid off 3 feet apart, and planted at a distance of 12 to 14 inches in the rows covered with hoes, and rolled. On or about the 20th of July, manure from the cow house and lot was spread, plowed under, and the ground dressed with the hoe. After this working, a succession of rains induced a rapid growth; the weather becoming very hot and dry, irrigation was resorted to on the 15th of August, and continued until the 25th with great success.—The plow was twice used after planting the corn; the hoes were also used twice.

Respectfully submitted by

J. W. PARKER.

The undersigned, acting as a Committee, certify that they have, with care, superintended the measurement of a crop of corn and oats on Dr. J. W. PARKER's farm this year, from one acre of ground, according to the measurement of Mr. Veal, a certificate of which is herewith submitted.

The crop was measured by us, and is to wit: 89 bushels of oats, and 82 bushels, one quart and one pint of corn. The land in oats, it is known to one of the Committee, included a small piece now in turnips. One of the Committee is aware that the product of that piece was not included in the parcel measured, as that portion of the crop was early cut and fed to the stock. It is also known to one of the Committee, that the crop measure, was the product of the same acre, the harvestihg, clearings and measurement, all having been done under his particular notice.

M. ADAMS,
JOHN GLASS,
E. B. HORT,

Columbia, S. C, Nov. 9th 1857.

[*From the Valley Farmer.*]

## Culture of Tobacco.

On account of the high price of tobacco, we presume a large crop will be grown the present season, and a few hints on its culture, at this time, may not be out of place.

It is generally thought but litttle skill is necessary to cultivate it successfully. But this is a great mistake. Perhaps there is no crop that will better reward the skill and labor bestowed upon it than tobacco. Skill is required to grow it well, skill is required to cure it, and skill is required to properly prepare it for market. Some planters almost invariably raise a prime article, and others as invariably sell an inferior article

The difference is caused by the degree of skill and intelligence possessed by the planter. We believe that by intelligent and skilful management, planters might generally raise crops a third or more larger from the same ground in cultivation.

### PREPARING A BED FOR THE SEED

is the first thing in spring to be attended to, in preparing for a tobacco crop. This bed is generally made on new ground, inclining to the South, and well protected from the cold winds of the North and West. Leaf mold and a small mixture of ashes constitute a good soil in which to start the seed. The bed should be well and thoroughly pulverized and raked clear of roots, &c., before sowing the seed. Sometimes the plants are started in a hot bed, under glass—but this is not often the case. The seed bed should have careful attention No weeds should be allowed to grow. If the plants come up too thick to properly develope themselves, they should be thinned out.

### PREPARINC THE FIELD FOR THE PLANTS.

The field selected for raising the crop should recieve a deep plowing in the fall and likewise another plowing in the spring. It should also be harrowed well and then rolled with a large wooden roller, so as to more effectually pulverize the soil and crush all the lumps that remain after the harrowing.

The field is then laid off in rows from three to four feet apart each way. Hills should then be formed with a hoe, into which, at the proper time, the plants should be set.—Of course the quality of the soil will have much to do, in regard to the amount and quality of the crop. Land that has recently been cleard of the forest is generally excellent for tobacco. So light and rich loams produce good crops. Having the field in readiness, the next thing to be attended to is

### SETTING THE PLANTS.

This should be done after all danger of frost is over and the plants have attained sufficient size. A cloudy, rainy day is the best for that purpose, or immediately after a rain will do. Should no rain occur at the proper time, the seed bed should be thoroughly watered so that when the plants are taken up some of the soil will cling to the roots.—After the plants are put out they must be carefully watched, and should any fail to grow, or should the worms destroy any of them, their places must be immediately filled from the seed bed.

### AFTER CULTIVATION.

The plants having been set in the field, it now remains to cultivate them. One of the best things for that purpose is the cultivator. They should be cultivated both ways and the soil kept loose and fine. The cultivator or plow should go through each row several times during the season. No weeds should be allowed to grow. Now is the time to bestow particular care on the crop. All the labor that is now put on the crop will return a good per centage.

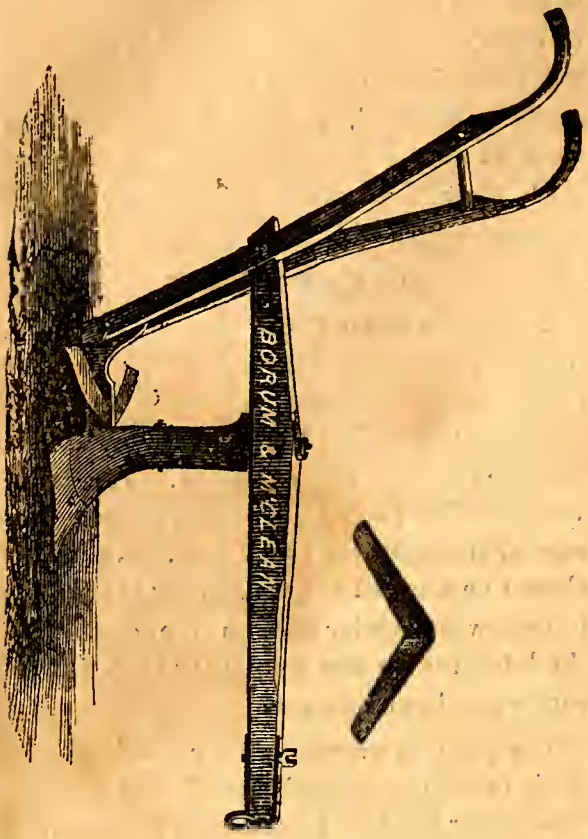
The plant is grown only for its leaves.—Eight or ten of these only are allowed to grow. The flower stalk and small leaves must be taken off so soon as to cause all the energies of the plant to be thrown into its broad leaves, which, alone, are valuable for market. The blossom bud, called a button, makes its appearance as the plant begins to show indications of ripening, and this must be removed. At the foot of each leaf stalk a shoot appears which must also be removed.

As we have before said, eight or ten leaves only are allowed to grow. In very rich soil, sometimes as many as twelve are allowed to grow. The top of the plant above the eight or ten leaves must be removed. As often as once a week the plant must be wormed and suckered. In a future number we will speak of cutting, curing, stripping, prizing, &c.

◆

**Chinese Sugar Cane.**—It is stated that over one hundred thousand acres of land in the United States have been planted with the Sorghum, or Chinese Sugar Cane. This is a wonderful result, when it is considered that only two or three years have elapsed since it was first introduced into this country.

## Improved Cotton Plow.



This cut represents a Plow recently patentented by Messrs. Borum & McClean, Agricultural Implement Dealers, Norfolk, Va., and is designed more particularly for the cultivation of Cotton, though some of the testimonials given, highly recommend it for the culture of Corn and Ground Peas.

The Plow has a double mold, with two wings or weeders, projecting two and four inches beyond the sides and in the rear of the point, either of which may be inserted in, and through the landside at pleasure, and suited to the work designed to be accomplished. The mold throws the earth slightly to the plant, and the weeder running under the surface cuts up the grass and pulverises the soil around the roots, thereby saving the labor of hand and hoe.

Several hundred of these Plows were sold last Spring, and the Patentees produce the recommendations of a number of gentlemen, who have given them practical tests:—among whom are Messrs. J. H. Adams, James O'Neal, J. D. Barnes, James Rountree, of Wilson county, N. C.; W. H. Jones, and John H. Hyman, of Halifax; W. K. Lane, of Wayne; L. H. B. Whitaker, of Enfield; W. W. Parker, of Edgecombe, S. G. Darden, of Isle of Wight, Va., &c.

Messrs. Borum & McClean manufacture these Plows, and recommend them as being strong and substantial, the wood and iron work being of best quality.

They are prepared to execute all orders with great promptness and dispatch.

Price $3,50 each, for less than six plows.
do. 3,25 each, for more than 6 and less than 12.

Price $3,00 each, for quantity over 12.

These plows are furnished with polished or ground castings when desired, at 25 cts. advance on each plow. Extra castings to fit these plows, always on hand at the following prices: Mold 75 cts., Landside 50, Point 20, Long Weeder 25, Short Weeder 20.

◆

Important to Housekeepers—Charcoal and Tainted Meats.—A Connecticut lady says:

"Some chickens during the recent warm weather had become slightly tainted. They were stuffed with freshly heated charcoal, and in twelve hours were as sweet and fresh as could be desired, not leaving the least disagreeable odor or flavor. Shortly after, on examining some fresh pieces of pork and fearing they could not be preserved until it was convenient to cook them, she packed them in a pan of powdered charcoal, and thus kept them with complete success."

◆

Fretting.—Two gardeners had their crops of peas killed by the frost, one of whom had fretted a great deal and grumbled at his loss; visiting his neighbor some time after, he was astonished to see another fine crop growing, and inquired how it could be.—"These are what I sowed while you were fretting," was the reply. "Why, dont you ever fret?" "Yes, but I put it off till I have repaired the mischief." "Why, then there is no need to fret at all." "True; that is the reason I put it off."

# EDITORIAL.

**RALEIGH, APRIL, 1858.**

## Agents Wanted.

We want active, persevering Agents, in every county, district and neighborhood in this State, and all the Southern States, to whom we will allow a liberal per centage on all cash subscribers obtained for the NORTH CAROLINA PLANTER. And we wish it to be distinctly understood we take no credit subscribers. Postmasters and others who may be disposed, are requested to act as our Agents in procuring subscribers, to whom we will allow a liberal per centage. To active, enterprising men, who will attend the Courts and public gatherings, this agency can be made to pay well. Specimen copies sent to those wishing to act as Agents. For further particulars, address,

A. M. GORMAN, Raleigh, N. C.

## Our Prospects.

While we are far from being disheartened in our enterprise—that of publishing a North Carolina Agricultural journal—yet, we are free to confess that we have not met with that cordial sympathy and co-operation, among the farming community, that we had expected. A few have helped us with pen, and purse and influence;—but the great body of the Planters have neither subscribed to the work, written a line for it, or helped it in any way. This is well calculated to discourage us, but that we hope for better things in the future. If each one of our present subscribers would get us up a club of five, (and as many more as they can,) we should feel greatly stimulated to persevere in our undertaking. Will each one try? The Planter will be published regularly, without fail; no one need hesitate to subscribe, for fear of its failure.

## Original Contributions.

We have not as many original Contributions for the April number of The Planter as we expected, or as we ought to have. The friends of our enterprise—those who desire to see a first class State Agricultural journal it our midst—*must write for its columns.*—All must see and feel the importance of this, and will, we trust, manifest their appreciation of the suggestion, by furnishing us with plenty of original matter for our May number.

But, in the absence of much original matter, we are able to present our readers with valuable papers, taken from our exchanges, a careful perusal and practice of which will interest and profit them.

We hope to fill our May number entirely with original contributions by writers from this and the adjoining States. If every one will write a page or two, the thing will be accomplished, and we will be able to present a vast and varied fund of information—and there will be much experimental knowledge thus mutually imparted.

## Preparation—Seed Time.

Farmers of intelligence and experience do not stand in need of suggestions from us, as to the time and manner of preparing for the approaching crop or of the proper methods of seeding, yet a few practical hints may possibly meet the eye of the inexperienced, which may lead to good results.

Those who have taken time by the forelock, as every prudent farmer should, have by this time, well nigh completed their preparatory arrangements for the crop, which is to produce their summer and autumn harvests. They have estimated their available force, measured in their mind's eye the number of broad acres to be cultivated, and partially calculated the results. This indicates wisdom; but how many have mis-calculated?—Perhaps, eight out of ten, have placed their figures too high; not making due allowance for wet or dry—sickness or disaster. Do not a majority of planters pitch too large a crop? Where one fixes his mark too low, ten *place it too high.*

The only safe rule we judge, is this: *Plant or seed what you have well prepared.* Time spent in preparing after you have planted, is lost.

In the work of preparation, we include, the making and repairing of fences; ditching or opening well your drains; collecting muck or other material for manure; composting; ploughing; hauling out manure, and removing from your fields noxious weeds, stumps, &c. All these we presume have been done or are in rapid progress. The most important question is, have they been well done? Well, no, in too many instances poorly done. The fences are decayed, encumbered with briars and small growth, and the bottom rail quite covered with vegetable mould. In every lock of the fence, there is perhaps enough matter to make a compost heap, that would furnish twenty hills of corn with nutriment, to make an additional ear, each. The drains are half filled and acres are submerged in water,—the lands contiguous are sobbed and soured beyond recovery for the ensuing crop. How beautifully will these sobbed spots appear, as the season advances. Dotted here and there, all over a field of otherwise luxuriant, thrifty corn or cotton, you will see a dwarfed, sickly growth, yielding nothing to the laborer. The manures, perhaps, which ought to have been in the field, to be placed in hill, drill or broadcast, are in the barn lot, or the lock of the fence, or in the swamp, wasted, if not sending forth upon every breeze, malaria and death. The ploughing is going on briskly, but what kind of ploughing is it? A two-year old rooster might have done as well, perhaps. The land has been scratched, not ploughed. O! friend, send your shear down into earth's treasure-house, and bring up the gold and silver that lie embedded but a few inches below! The rotten-stumps, noxious weeds and stubble, about which nestle the embryo worm or bug, of course have been removed and burnt.—No, there they are yet, affording shelter to the mischievous vermin, which will blight the young corn and cotton. And yet, in this state of things, you are going to make a crop. How, in the name of common sense, how?

But seeding time is at hand. Surely, you have been particular about securing the best seeds. Mother earth will not accept of doted, shriveled, blighted seed. She must have enough of it and of the best kind, if she promises a full crop. Your seed have, perhaps, been planted ten years on your own premises, on the same kind of soil. They will do far better on the fields of some distant neighbor. Can't you barter yours for his?—Try it, and when you get it, let it be well rubbed or fanned, as it may require, and weighed. Don't put light, chaffy seed, and a grain here and there into the earth. Let it be heavy, fat and sound, and don't be stingy, but scatter liberally, if you want a liberal return.

## The Agriculturist.

Every man should engage in some legitimate, respectable, productive vocation. He owes it to himself, to posterity, to his country, to his God. An idler is an enemy to his race, to his Maker and to self. All employments, however, are neither honest, respectable, nor beneficial. But no man is obliged by necessity or his true interest, to engage in them. Man's wants, responsibilities or interest, furnishes room for the proper and lawful exercise of his talents, his time, and his resources. And this wide world is broad enough to afford employment in some suitable vocation, for every man, woman and child in it. Some vocations are more desirable than others, yet all are not placed in circumstances fitted for these. The constitution of society has been wisely arranged by Providence, so as to give variety to occupation and to make this variety best adapted to the good of the whole.

Public opinion has long since in this country given its verdict in favor of agriculture, as the most desirable of all vocations. Indeed in all ages, the masses have so believed. In all countries and periods, sages, philosophers, historians and poets, have given their testimony in favor of the "tiller of the ground," as the most happy of mortals.—They have not done so, without much truth and reason to sustain them. Let us briefly enumerate some of the reasons in favor of agriculture as a vocation.

1. *It is the most independent.* Not of God surely, for none should feel so dependent upon Him as the planter. Without the genial sun, the hoar frost, the fleecy snow, and the "early and the latter rains,"—without the constant blessing of Heaven upon his labors, none would be so helpless. But he is independent, comparatively, of those engaged in other employments. He is or should be more a producer than a consumer. What is necessary to sustain life or increase his means of enjoyment, he produces on his farm. More truly, perhaps, than any other man, he can say, that he eats his own bread and meat.

2. *It is the most cheerful.* He has his perplexities and vexations, but then his every day employment is directly promotive of a cheerful spirit. No pent up Utica is his, but off from the strife and turmoil of the world, the forest bounds his enclosure, and his industry supplies any lack of bustle and noise. The ploughman's sprightly whistle, the merry chirping of birds, the bland, soft breezes, the bright sun and sky above, the quick growing corn, the waving wheat, the luxuriant cotton fields snowy white, the lowing of cattle, the bark of his dog, the squeaking of his fat pigs, the brisk tramp of his well fed steeds, and the shout of the "harvest home" all, all give to his calling an air of plenty, ease and contentment, which diffuses a lively cheerfulness all around him and makes him a happy man.

3. *Agriculture is promotive of honest dealing.* There are no tricks in his trade, at least, there needs be none. His market products command the cash. He has no inducements to play the jockey, or the jobber, or the sharp speculator. He has not frequented 'Change, and hence is neither a "bull" nor a "bear," but his question is, "What is the market?" Few words and quick sales is his motto. Hence when he lies down at night, he has not to whip conscience to sleep, to keep it from telling that he has some of his neighbor's cash in his pocket. What he has is his own, and his customers have full consideration for what they paid him.

4. *It is a good school of morals.* Of course this greatly depends upon the principles and manners of the proprietor. He controls his premises. Can guard and direct the principles and associations of his children and domestics, and keep out the vicious and contaminating. There is no time for idleness on a well regulated farm, and hence the follies and fashions of uppertendom are avoided, and the grovelling and vicious habits of the rabble and degraded are not imitated.

5. *It is the most certain road to competency.* The planter's advance to wealth may be slow, but it is sure. Bad crops may block up his way, but the steady annual improvement of his lands, the increase of his servants, and the annual additions to the number and improvement of his stock, constitute a sure basis for accumulation and profit.

Much more might be said, but we forbear. Who would not be a farmer, if he could?

* * *

## The Bank—Large Dividends.

There is no investment so sure and regular, and that declares such large dividends, as the *Farmer's Bank—of* MANURE. Paper Banks, with promises to pay, may be cut short by the stern frosts of commercial embarrassments; and even the gold and silver in the plethoric purse of the Sub-Treasury be exhausted by the stagnation of trade and the revulsion of the times;—but *our* Bank—the *Manure Bank* of the Farmer, always pays out more than dollar for dollar on all investments and deposites made in its vaults—

and never suspends specie payments. And when we remember how easy a matter it is to "make our regular instalments" and prevent a "protest on our drafts" by its faithful "cashier," we are greatly surprised that so much capital is allowed to be squandered and lost all around us, that would so rapidly increase the number of our shares in this great and inexhaustible Bank.

Every pound of bones thrown away—every gallon of soapsuds and chamber ley—every bushel of ashes or cotton seed—in a word everything that will decompose and make a manure, that is allowed to be wasted, instead of being added to the manure bank, is a wilful and culpable squandering of the most valuable and remunerative products of the farm, and if persisted in, cannot fail to result in barrenness, poverty and bankruptcy.

And even many articles that have been considered as entirely worthless as a manure, in these days of scientific research, investigation and experiment, are being proven as the best of fertilizers. In a report of experiments with different manures, contained in a recent issue of the North British Agriculturist, we observe that one of the manures used was saw-dust steeped in chamberlye for six weeks. This, like the other manures reported, was employed as an application to a crop of turnips. Nothing is said about the manner in which it was dried and made fit for sowing, whether by exposure to air and sun, which, we think, would rob it some of its most valuable properties, or by mixing it with some dry and pulverulent substance. Should any of our readers (says the American Agriculturist,) try this new manure, it would be well to employ some absorbent of ammonia, as charcoal dust or seasoned muck, in the reduction of it to a dry state. Neither is the quantity which was used mentioned, all that is said under this head being that it was "sown with a good handful along the drill." The effect of this manure upon the turnip crop is about equal to that of four and a half cwts. of Peruvian Guano, costing about $16; the product of the plot manured with the soaked saw-dust, being at the rate of 17 tons, 8 cwts. of turnips per acre, (white globe,) and that of the plot manured with Peruvian guano being at the rate of 17 tons and 18 cwts. per acre.

## "More Meat."

We give in this number some two or three articles, upon the necessity for Southern Planters paying more attention to the raising of Hogs, for the purpose of supplying themselves and their neighbors with Pork. The Editor of the "Cotton Planter and Soil," most pertinently remarks, that the importance of this necessity grows upon us, as our labor annually increases; and he contends it can be raised in the South, with our Cotton, etc., better and cheaper than that we get from the west. He says:

Our interest demands that this information be known to our planters; that the economy of growing bacon cheaply and plentifully at home be demonstrated clearly and unmistakably. This is the work of a benefactor; you know and I know it can be done, but do our neighbors know it, do our planting friends from the Carolinas to Texas know it? They must know it, and knowing it they must practice it, else this cry of "more meat!" that is now, perhaps, by some, laughed at, will at no distant day fall upon the ears of our posterity, as a wail of lamentation more to be deplored than the overshadowing swarms of the Egyption locusts of old. "More meat" is and will be the constant cry—every new born slave cries more meat! and every newly opened plantation demands more meat!—Where is our reliance now for our supplies? Among our friends or our enemies? Is this a reliance for wise men—is it an economical reliance? I say it is neither. Then let this subject have our earliest, best attention. Let our planters know the whole difficulty, the only remedy and their true interest. Every living pig, when the proper and best stock is procured, can be made to put on a pound of bacon for every day it lives, and this is the only true and cheap way to make bacon.

## The Black Hawk Stock.

In our February number we called attention to two fine Statlions on exhibition at Clayton's Stables, in this City. They are still here, and many of our enterprising citizens are availing themselves of so good an opportunity for securing this valuable and celebrated blood. We desire again to call the attention of the Executive Committee of our State Agricultural Society to the matter, and we hope at their meeting this week they will take seriously into consideration the propriety of purchasing "Goldfinder," with a view of introducing his superior blood into our State.

"Goldfinder" is a beautiful jet black—a perfect model of a horse for symmetry and beauty; nearly six years old, 15½ hands high; has great speed, power and endurance, very muscular and large bone. His ancestry is pure, being sired by the old Vermont Black Hawk out of a "Messenger" mare. He is claimed to be the beauty and pride of all the Black Hawks. His speed, as a trotter, may be judged from his exercising on our State Fair track, when he was timed by some of our citizens who were looking on: He turned the track in 53 seconds--distance one-third of a mile and 70 feet. He is a half-brother to the fastest trotting Stallion in the world—Ethan Allen.

The Morgan Stock is celebrated for all practical purposes, (except a running horse,) for beauty, style action, draft and speed—very healthy and hardy—and with an eye that no other horse has. No one can fail to notice to admiration the eye of "Goldfinder;" it is yellow, with deep white sight—being emphatically the "Hawk's eye."

Mr. Derick, the owner of these Horses, has sold several Stallions in this State for several years past—all of which are living and doing well, and have proved valuable investments.

The Groom now with "Goldfinder" can be retained, if the purchaser should desire.

We hope all who have opportunity will call and take a look at these noble Horses.

## Agricultural Implement House.

We have received an illustrated pamphlet "Catalogue of Agricultural Implements. Machinery, &c., &c., kept on hand and for sale by William H. Oliver & Co., Newbern, N. C." This Catalogue contains engravings of a large variety of Plows, straw and cornstalk cutters, shellers, cleavers, harrows, mills, cultivators, crushers, horse-powers, cotton gins, reapers, mowers, thrashers, smut machines, portable saw mills, and a variety of other articles for farming and domestic uses, too numerous to mention.

We are proud to find so large and useful an establishment in our own State, and hope the enterprising proprietors will be liberally sustained. Newbern will soon be, indeed is now, accessible to most portions of the State by Railroad, and North Carolinians can now be supplied, in their own State, with any Agricultural Implements they may desire, by addressing W. H. Oliver & Co., Nowbern, N. C.

* * *

*To the Editor N. C. Planter:* Is there such a thing as a Saw Mill of Light draft, to be operated with horse power—something with which every Farmer, with a cheap power, could saw his own timber? Answer in the Planter. Z.

In answer to our Correspondent's inquiry, we will state, that we find in a late number of the Southern Farmer, a notice of perhaps the very mill he is in search of. It is called the Pecker Saw Mill, and is built in Hanover county, Va. Mr. Robert N. Neblett, of that county, writes the Editors of the Southern Farmer, as follows:

"I have on my farm, at this time, in operation, one of these mills. Most of my neighbors have seen it in operation; one and all are perfectly delighted. They pronounce the work done by it, as to smoothness, far superior to that done by any Circular Saw. I can cut, with eight mules, Pitt's horse power attached, from fifteen to eighteen hundred feet of timber per day, and it is done well. The draft for the eight mules is quite light. It will saw oak quite as well as pine. The cost of a mill, delivered at Blacks & Whites

Depot, does not exceed $285. Mr. Haw will put the mill up and start it to work, by the purchaser paying the expenses of his workmen up and down the railroad from Richmond.

R. N. N.

Nottoway, Feb. 26, 1858.

The Editors of the Planter thus speaks of the Mill, his correspondent, &c.:

We are much obliged to our correspondent for introducing this saw mill to our notice, and that of our readers. He is a practical man, and speaks from experience. Gentlemen owning large farms, on which it is necessary to use considerable quantities of sawed stuff for out buildings, fences, &c., would find it economy to have one of these mills erected on their premises. An additional advantage would enure to the proprietors by being able to convert a great deal of timber into valuable material, that is now of very little use. We have no personal knowledge of the inventor of this mill, but we learn that he is a machinist of entire integrity, and that his work is all that he claims for it — Should any of our readers wish to obtain information from other and more disinterested sources, we have no doubt that Mr. Robert N. Neblett, Blackface, or Mr. Richard Irby, Blacks & Whites, will respond to any application that may be made to them.

EDS. SO. FARMER.

## Correspondence of the North Carolina Planter.

☞ A Correspondent writing from Robeson county, says:

I regard this portion of North Carolina as being destined to be the best farming portion of the State. For locality, it cannot be surpassed. We have thousands of acres of rich swamp lands as yet unnoticed, that cannot be surpassed; our pine lands are susceptible of the highest state of improvement, being level, with a good clay foundation, well adapted to corn, peas, potatoes, cotton and rice. The latter can be raised on the comman uplands in abundance. I have seen land, that would not make 400 lbs. cotton to the acre, produce from 25 to 30 bushels of rice. I think the time is not far distant, when this entire country will be devoted to raising rice.

Extract of a letter dated GREENSBORO', March 5th, 1858.

Enclosed you will please find one dollar, the subscription to your Agricultural paper for the current year.

I wish you very great success in your enterprise. The agricultural interests of our State requires a local newspaper, devoted entirely to their advancement; and it will be saying but little for our State, with all her diversified products, if her farmers and planters have not pride and patriotism enough to sustain, and well sustain, one agricultural journal.

Extract of a letter from Farmington, Davie county:

Maxm. Cuthrell killed a hog about the 29th January, that weighed 517 lbs nett.— He was of the improved No-bone breed.

If the weight of this one is too small, I can give you the weight of others of our Davie hogs, when slaughtered, that cannot be beaten in the State. What did Mr. T. J. Lemay's hog, which he purchased of me at the State-Fair, weigh? J. F. C.

Will Mr. L. please give the information asked?—EDS.

MR. PLANTER:—Can you or any of your intelligent readers or correspondents, tell us how or why it is, that blooded cattle are so apt to die in North Carolina? Two gentlemen, of this city, purchased fine Durham Cows (half-breeds) at our last State Fair—raised about Lynchburg, Va. They did well for a few months and gave an abundance of milk—but they have both died within the last two months. Mentioning the subject to a friend he observed that in Virginia, perhaps, there was an old statute law which forbade, under penalty, the removing of cattle from one direction to another—possibly from North to South—even from one county to another in that direction. And the reason assigned for such a law, was that such removals almost always resulted in the introduction of murrain and other diseases among the cattle.— There may be much phisiological philosophy in this law, strange and old fogyish as it may appear, and I would like to have the views of cattle raisers upon the subject. H.

[We hope some of our readers will give us light upon this subject. The fact that so many of our citizens have lost cattle for which they paid high prices, as our correspondent above did, has greatly tended to prevent the introduction of blooded stock into our State.

A gentleman who has much experience in cattle raising, to whom we read the above communication, says, that the mortality among blooded cattle is not attributable to climate, or to being removed from one latitude to another—but is owing to too much corn, or corn-meal being given these cattle as a food. Such food is too heating, and produces too much blood for the health of the animal, causing an overflow of blood to rush to some one portion of the system or another—sometimes terminating in the head, the lungs, and sometimes even the limbs; and on dissection the parts affected will be found to resemble coagulated blood, appearing like jelly. In cattle it is called bloody murrain, in horses, (a precisely similar disease, produced from the same cause) it is called "blind staggers." He gives us the following remedy for this disease: Blood should be immediately taken from the animal and warm bran "mash" administered—keeping it in a warm dry place, and it will speedily recover.

To prevent this disease, our informant says—instead of corn meal, give wheat bran, carrots, oats, and fodder or hay, to your cattle. They will thrive better, give more milk, and be free from disease. He also gives it as his opinion that too much corn is given our horses in the South—causing a heated, drying-up process to the lubricating oils of the joints, stiffness of the limbs, and a lack of free muscular action when put in motion, especially with trotting horses. We should be glad to hear from others on this subject.—Eds. N. C. Planter.]

## Planting and Cultivation of Corn.

The following mode of planting and cultivating corn, was introduced into our neighborhood by Thomas W. Harriss, Esq., who makes more corn with less work than any planter, on the hills, of my acquaintance.

1st *Preparation of land.*—In the fall or winter break the land with double plow as deep as two mules can pull it: let it lie until ready to plant: then lay off the rows four feet apart, then throw into beds, plant in the water furrow, one grain in a place, thick enough to chop out to a stand with a hoe, being much easier than drawing out with the hand; cover with one furrow on each side with turning plow and follow with a small one horse drag harrow, or the corn would be covered too deep. After the corn is up and large enough to bear it, run three furrows, with turning plow, in the middle, throwing the dirt from the corn, beginning with the first furrow just far enough from the corn to admit another, which will, after the three furrows are run, form a bed in the middle and will have the corn on a small ridge.—Now let the hoe hands run over and weed it, which is quite easily done. This is the first plowing, only three furrows to the row, and the first and last weeding.

2d *Plowing.*—Throw one furrow each side to the corn, with the same plow, and run a five tooth cultivator down the middle, only three furrows.

3d *Plowing.*—Throw out the middles with three furrows, using precaution not to plow too near the corn, and the corn is laid by early. Allow me to add, I adopted the above mode of cultivation last year, and made more corn than any year before. About two days after I laid it by, my corn becoming a little weedy, I run two furrows down each row with the five tooth cultivator, which left my land level and consequently not so liable to wash. I am very much pleased with this mode of cultivating corn; yet I would be very glad to see a better plan suggested by some of your readers.

Very respectfully,
EDW'D A. THORNE.
Halifax county, N. C.

We find the following excellent communication in the first number of the "Ledger," a handsome paper just commenced in Wilson N. C. This article breathes the right spirit and comes from the right direction—from that section of the State that was the pioneer in the agricultural improvements of our State. Well does the writer call upon other sections of the State to "Keep up."

Old Edgecombe furnishes the largest number of subscribers to the N. C. Planter, so far. We call upon Wilson to "Keep up" with her mother, by sending on 100 names forthwith. The following is the excellent article alluded to:—Eds. Planter.

Messrs. Editors:—The cultivation of the soil is the source from whence spring all our supplies, and from which we derive wealth and prosperity. All other interests look to and are dependent on the product of the soi for maintenance and support; and just in proportion to the advancement or derogation of the agricultural interests of a country, are the social, educational, and all other interests improved or retarded. This is confirmed and demonstrated in the history of every civilized community.

Thirty years ago the agricultural interests of North Carolina was of a limited character, And whilst her soils were good and adapted to the various products indigenous to her climate, yet the early emigrants seemed to rather hold them in reserve for the rising generation, and selected such only of the lean and meagre soil as would yield the necessary home suppies, with which they were content. And although the lands contained all the elements for reclaiming the waste and worn out soils, their chemical properties were little understood and less cared for, and rather than forego the labor of improving them, believing it to be greater than opening new lands, the consequent alternative was emigration, which continued to break in on her population until within a few years ago, when some spirited, enterprising and energetic agriculturist mooted in her borders the propriety and utility of establishing a State Agricultural Society. This was done and many of the Counties followed, and the happy and signal result is the interest in her soil which has asumed a new feature, and with her social and educational, all other interests have proportionably advanced, emigration has ceased and migrations taken place. Her soils have been analyzed and improved, and those that brought the nominal price of $2 per acre will now readily command from $10 to 20. Facilities have been opened for transportation of her rich and abundant products, and many of her planters, especially in the Counties of Edgecombe and Wilson, are boasting of greater yields from a given acre, than is produced on the best soils, eith- North, West or South. Such advancement accomplished in so short a time is well calculated to invigorate with continual perseverance in the labors of developing the rich resources not only of the soil of the lands, but the soil of the intellect. They should be adopted as twin sisters and go hand in hand in the great work of developing and improvidg the agricultural, political, religious and social resources of our patriotic and independent Old North State. Yes she is proud of her name—her citizens are proud of her. In her agricultural department we should insert at the head of the column old Edgecombe and her daughter Wilson, and say to others "keep up." We would also suggest the propriety and utility of re-organizing the Agricultural Society between the two, or seperately, and of holding a Fair alternately in Tarboro' and Wilson. Let us have a Fair and exhibit annually our various products, stock, &c. It will greatly increase the spirit of emulation, and be productive of much good to the cause of Agriculture at home and abroad. Let us do this in Wilson at any rate.

# HORTICULTURE.

**S. W. WESTBROOK, EDITOR.**

## REMARKS ON ORCHARDING.

*Continued from the March number.*

### OUR SIXTH PROPOSITION.

*Additional fertilizers for top dressing annually.*

In discussing the subject of Mulching in the March No. we did not, offer any views upon the mode of decomposing the large amount of mulching which we recommended for each tree as an annual dressing, because the subject of additional fertilizers is inseparably connected with this.

Mulching does not only serve to prevent the evaporation of moisture from the soil, and protect the roots of the tender plants from the scorching rays of the summer's sun, but it is a great fertilizer; because in its organic character it contains more or less of those elements which enter into the anatomical structure of the tree. And in order to make it subservient to the tree, as an immediate fertilizer during the growing season, a decomposer must be used, for which information read:

Prof. Jas. W. Johnston, in his lectures on the application of Chemistry and Geology to Agriculture, on page 194 of his work, says: "The action of quick lime upon the land is one of the most important which presents itself to the observation of the practical Agriculturist. Among other effects produced by it, is that of hastening the decomposition of vegetable matter, either in the soil or compost heaps; but this effect is materially promoted by—if it be not wholly dependent upon—the presence of air and moisture. By this decomposition, carbonic acid, and other compound substances, are produced, which the roots are capable of absorbing and converting into the food of plants."

In view of the above facts addressed by Prof. Johnston, (which every practical agriculturist knows to be true,) we would recommend an annual dressing of one peck of unslacked lime, or twice the amount of unleached ashes, to an Apple, Pear, Cherry or Almond tree of the largest size, and half the amount of either for Peach, Nectarine, Apricot, Plum and Quince; which should be applied and incorporated with the mulching in moist weather, and a small amount of soil should be thrown over the whole to keep the mass compact, so as to favor decomposition. For smaller trees, we would recommend a less amount of lime or ashes for an annual dressing. To a newly transplanted tree, one pint will be sufficient, and a larger amount would be injurious. The amount should be increased annually, as the tree increases in size. The application of the lime, or any other fertilizer, should never be applied to the collar of the tree, but where it will come in contact with the spongioles or rootlets.

Common salt may be applied in small quantities, as a surface dressing for all fruit trees, with fine effect. And for the Plum and Quince, it is almost indispensable in the production of good sound fruit. It is not only a fertilizer for the Plum tree, but to some extent a protection against the Curculio, the great enemy to plum culture. Quince trees that grow near a smoke-house, generally bear fruit about twice as large as the fruit grown on any other location, unless they have an annual dressing of salt. Other trees may do without this dressing, but each large Plum and Quince tree, should have an application of from one to two quarts sown around the tree, as far as the roots extend, and well stirred into the soil early in the Spring.

A number of articles are found in all localities, and more abundant in cities, towns, and villages. that are very important fertilizers for the fruit garden, are permitted to waste through neglect, or for the want of a knowledge of their proper value. Such are the offal of butcheries, the blood, the hair, &c., which are regarded as highly important in grape culture. The offal of old plastered buildings, the deposits of old cellars, street sweepings, soot, trimmings from harness and shoemaking establishments, the curryings and refuse from tanneries, and many other things that should be transfered to the orchard as a general top dressing.

Large quantities of iron filings, turnings, cinders, and coal dust, are allowed to accumulate at machine shops, foundries, forges, blacksmithing establishments, and the trimmings from tinneries, which are very important in Apple or Pear culture, where there is a deficiency of the oxide of iron in the soil. A peck or half bushel applied and worked into the soil, at the extremities of the roots of Apple or Pear trees, will in a great measure stop the ravages of the blight and destroy constitutional defects in the trees that nothing else will.

Animal manures may be used as a top dressing, to a limited extent, with fine success. But while there is such an abundance of organic matter in the reach of every orchardis, we regard it as almost prodigal to apply animal manures to fruit trees.

* * *

## Southern Pomology.

Our attention has been recently directed to the importance of forming a Southern Pomological Society, for the purpose of discussing the merits of fruits generally, and establishing a proper standard of nomenclature. We find that when delegates attend the American Pomological Society, that the merits of the fruits discussed are principally Northern and Northwestern; and if a Southern delegate should introduce a new fruit from the South, which has proven first rate, that the delegates North and Northwest have no knowledge of its redeeming qualities, and consequently the meeting of the National Society does not effect much good for Southern Pomology. We have been recently corresponding and conversing with a number of gentlemen on the subject, and are happy to find a general willingness on the part of fruit culturists, and amateurs, to acquiese in a movement of this kind.

We furthermore recommend the formation of a Pomological Society in North Carolina. Who will give us (through the Planter) their views upon the subject, and who will pledge themselves to attend a meeting some time in May, in the city of Raleigh, for the purpose of forming a Society as early the ensuing summer as convenient, so that monthly meetings may be held, for the purpose of discussing the merits of the various fruits, as they ripen in their respective seasons?

The State Fair meets too late in the season for an exhibition of the major portion of the fine fruits, such as Strawberries, Currants, Gooseberries, Raspberries, Apricots, Plums, Nectarines, Peaches, early Apples, and Pears. We have no doubt that an array of fruits could be brought together monthly, in North Carolina, that would do credit to any State in the Union. Pears of parallel kinds, twice as large as Northern ones, and much better flavored. We had like to have said that Dr. Andrews of Charlotte, raised a Duchess de' Angouleme Pear, that weighed two pounds. Please tell us the weight, Doctor, and give us your assistance. And you, Dr. Asbury, we should like to hear about those large bunches of grapes, and have your influence also.

Our friend E. W. Fonville, of Onslow, raised a Bolmars Washington Plum, eight inches in circumference, during the summer of 1856, we should like to have some aid from that region. What say you friend Fonville? And them Morgan Pears, the very acme of excellence; how we should like to see them in the convention of fruits, with a number of their friends hard by; particularly such gentlemen as Mr. Chas. H. Stevens, Thos. I. Faison, Dr. Jno. Hill, Dr. Herring, and others And then what a beautiful bevy of red cheeked natives from the Mountain regions, only excelled in beauty and sweetness by the great bevy of rosy cheeked lasses that also are inhabitants of their own native hills.

Who will engage in the formation of a pomological society in the west? Please let us hear fomr you Rev. Jas. Hamilton, Mr. Bently Laws, Silas McDowell, Esq., and others, and you too Dr. P. W. Stancil, Col. W. L. Steel, from Richmond county, and other gentlemen in your vicinity. Please give us your aid and influence, and gentlemen all over the State; and we should like to have the aid of the Ladies too, for if we can obtain their assstance, success will be sure to perch upon our standard.

By this movement we wish to make the fruits of North Carolina more celebrated, better flavored, and more abundant, than in any other State in the Union. We have the soil and climate, and everything in our favor, to bring about the consummation of so desirable a result, and if we do not favor this praiseworthy enterprise, which does not only add to the attractions of home, but will add largely to the wealth and prosperity of our State, we deserve none of the blessings that are the offspring of the labors of an energetic people.

Since the above was written, we have received the following from Mr. Hamilton, which we insert with pleasure:

## Horticultural Society for North Carolina.

We are much in need of the Society above named. Our nurserymen and fruit growers have not the encouragement that men of the same profession have extended to them in many other States. When the State Fair is held, it is too late for our most beautiful fruits to be exhibited. Fine Fruits, the public generally know only in name. The best peaches also are out of season. No display can be had. Now, I propose to our Nurserymen, one and all, also all amateurs, to think this matter over. Will not Mr. Westbrook give his views on the subject, such as to organising a society, to be held in Raleigh or any other point most suitable? Will not our Nurserymen and fruit growers stand forth in their true position, and give their views through the Planter on the subject? I have thrown out the above hints, trusting to hear from others on the subject.

WM. H. HAMILTON, Raleigh.

## Stationary Grafting.

*The time for doing the work, and how much should be done annually. Also some cautionary remarks, about the manner of having the work done, as it has been practiced for the last twenty or thirty years in the Southern States.*

As Southerners, we have a common interest in Southern prosperity with all Southern citizens; and as such it behooves us, and all others individually, and collectively, to maintain the rights of our unsuspecting people, when we perceive that the insidious swindlers, from Hoosierdom, and the land of wooden hams and nutmegs, are about to practice a fraud upon the unwary, by stealing, or swindling, either in political, or domestic economy.

We do not introduce the above caption, because we wish to heighten the warmth of feeling, now existing between the Northern and Southern people. By no means. We would rather pour oil upon the troubled waters, and hush the strife into the silence of death. But at the same time, we are under no obligations to a people who would curl up the lip of scorn at a Southerner, as soon as he sets his foot on Northern soil; or would conceal his hatred for us and our institutions, on the account of mercenary advantages.—For this we detest him, more than the individual that shows us open hatred.

But our business at present, is not with Northern book, tape, and rat poison pedlars, razor grinders, and all the etc. of Northern catch penny drummers and fifers that pass through our country, but with a certain set of itinerating grafters, that have been passing through the Southern States every Spring, for the last thirty years, for the purpose (as they say) of improving our Southern fruit.

We make the assertion that the fruits of the South, have not been improved, but that hundreds of good thrifty orchards have been entirely ruined, by the course pursued by those Ohio and Northern Grafters.

Our first objection (which we regard as conclusive, because we have tested what we say,) is that at least nineteen out of twenty of the Apples and Pears that are brought from the North and North-western states, will not suit our climate; and many of them cannot be acclimated, under fifteen or twenty years, and some will never undergo acclimation.

Our second objection is, that this abolition, itinerating class of imposters often swindle our unsuspecting people, by inserting kinds of fruit in their trees, which are not genuine.

The third cause of dissatisfaction among a number of our planters is, that they will insert from fifty to three hundred grafts in a single tree, and try to persuade the owner that that is the way to obtain good fruit the quickest.

In the fourth place, we object to the form of the contract entered into by the patrons of those Grafters. In order to carry out the scheme with success, when a company is formed to go South on a grafting expedition, they select the most loquacious member of the association, and send him in advance of the operators to make contracts and show the large fruits, to attract the attention of the unsuspecting, and make the engagement for the number of grafts as large as possible.—And in making the contract, they are very precise to have it understood, that they are to be paid for all the grafts that are living in June, because they know that from one third to two thirds of the grafts inserted where such a number is set in one tree, (where the top is entirely lopped off,) will perish to a less or greater extent during the months of July and August.

We think our fifth objection is *very conclusive*, (because the experience of our people concur with our views during the money pressure for the last year or two at least.) for this is one among the many swindling modes to drain the monetary resources of the South, as it is not uncommon for one set of grafters to realize as much as $5000 during the grafting season. Some cause for the suspension of specie payment.

Our sixth and last objection that we shall now offer is, that their mode of grafting is ruinous to any orchard. And as a bare assertion may not be satisfactory to those that have not reflected on the subject, we shall here offer some reasons for the declaration that we have made: If a tree could be obtained from the earth with all its roots entire, it would be observed that the roots are equivalent to the top of the tree; and in proportion as either the roots or the branches of the tree are cut away more than the other, just in that proportion the equilibrium is destroyed, and deterioration in the health of the tree must take place, that is if the tree has been decapitated. A plethoric habit in the tree is established thereby, and the sap or lifeblood of the subject stagnates, and the result is premature decay, and death.

Now we would not have it understood, that we condemn Stationary or Spring Grafting, in the tops of thrifty growing trees, where the fruit is not good; we recommend that it should be done; but the work must be done gradually. Where a tree is large, the grafting should not be completed in less time than three or four years. There should not be more than ten grafts put in a tree at one time. The first ones should be inserted in the top of the tree when the sap begins to flow freely in the Spring. The next Spring insert as many more lower down on the tree, and so on until the whole tree is entirely changed. No limb should be cut off to graft upon larger than an inch in diameter. The sprouts should be rubbed off each season as they appear before they grow to any size, in order to keep them from robbing the grafts of the sap. Smaller trees may be grafted in one or two years, according to the size.

We would give a chapter on Grafting, but we think it entirely unnecessary as there are a number of books published containing information on the subject, with plain illustrations of the mode of performing the work, among which are, "The fruits and fruit-trees of America," by the lamented A. J. Downing. Also a new work commenced by himself before his death, and consummated by his brother Charles Downing. Also "The Fruit Garden," by P. Barry; and the American Fruit Culturist, by J. J. Thomas. A work on the Fruit and Kitchen Garden, by Patrick Neil. Also a Southern work on the Kitchen and Fruit Garden, by William N. White, of Athens, Ga., which we think should be in every library in the Southern States. The above books may be obtained, or a part of them, in Raleigh, Wilmington, Salisbury or Charlotte, in this State; and in all the prominent book stores in the Southern States.

## The Egearis, or Peach Grub.

The Peach Grub, or Borer, is the most formidable enemy to peach culture, in the South, and may be exterminated, by several modes, with comparative ease. The best time to commence an attack upon the fortress of the enemy, is during the month of November. Take a common weeding hoe and scrape away the dirt, about one foot from the collar of the tree, down to the latteral roots. If there is any appearance of gum around the collar of the tree, or in other words, that portion of the tree just at and above the latteral roots, it is a sure indication, that the Borer is in the vicinity, carrying on the work of death. Scrape away the gum and find the aperture from whence the gum has exuded, and with a pruning knife press upon the bark below and about the apperture, until it is ascertained, by the yielding of the bark, how far the borer has progressed; dig into the bark with the point of the knife, and take him out. Let the tree remain in this condition during the winter, and in April, if there are signs of gum, examine the roots again and extract all the Grubs, and apply a shovel full or two of leached ashes around the collar, above the roots; and draw the dirt back again and fill up the cavity smoothly. If the work has not been done before Christmas, or during winter, it is highly important that the Grubs should be destroyed in the spring. They may also be killed by running a wire into the hole where they have made their ingress under the bark, unless they have made a circuitous route.

Another effectual way to destroy them is, to make a narrow basin around the root of the tree, and so elevate it that it will contain a gallon or two of strong brine, which will be sufficient to kill all the Grubs and insects about the root of any Peach, Plum or Apricot tree. Small trees should have a less amount applied to them, say one quart to the tree. No newly transplanted tree should have the brine applied to it the first year.

Another way to exterminate the Grub, may be practiced with fine success in the pine region where virgin dip turpentine is so abundant: Make the basin as directed for the application of the brine, and fill up full with virgin dip, above the collar of the tree. The turpentine insinuates itself in every crevice of the bark, and completely suffocates the depredator, and at the same time is so elastic in its nature, that it yields to the growth of the tree, and will remain and protect the roots and collar of the tree for two or three years, when it will need another application. Two or three quarts will be sufficient for any ordinary sized tree, consequently one barrel will be sufficient for some fifty or sixty trees.

**CORRECTION.**—In the February number there occurred some typographical errors that should have been noticed in the March number:

On the subject of heading back or foreshortening, in the sixth line "longate" is used for elongate.

Where we intended to say that the trees will last longer than if they were permitted to grow without training or *pruning*, the expression is, training or "*forming.*"

## April Gardening.

March has been a cold, wet month, throwing the Gardener considerably backward in getting his seed into the ground. April will therefore be a busy month. It is not too late to plant Irish potatoes—plant in deep, mellow soil, manure with wheat bran, one quart to the hill, and you will have the best of mealy potatoes. The later varieties of English peas should now be planted—let the ground be very rich and deeply pulverized. Early corn may now be planted: also beets, carrots, parsnips, lettuce, salsify, mustard, kale and asparagus seed. Remember that the best of vegetables are reared by rapid growth—hence your soil must be deep and rich, and the plants well cultivated during their early growth. Don't plant your seed too deep.—If the soil is well prepared, the roots will seek their known depth.

☞ We thank our friend and Brother Pomologist, for the following interesting letter, and hope to have the pleasure of hearing from him often. We have not time to make any remarks upon his experience and suggestions, so handsomely given, as we wish to get his letter in the April number of the Planter which was nearly ready for the Press when his letter was received. We may do so in our next. In the mean time we hope he will let us hear from him again.

And we also invite all Pomologists to contribute to this Department of the Planter.

EDITOR.

FRANKLIN, Macon co., N. C.,
March 17, 1858.

*To the Editor of the N. C. Planter:* In the present communication, I will try to present a few plain statements of facts, the result of many years experience, in relation to that branch of husbandry in which I have almost been exclusively engaged; to wit, Pomology; particularly that branch of the science which embraces Winter Apples.

Every individual who can trace public opinion back for forty years, must remember at that period that the soil and climate of the Southern States was considered utterly unsuited to the Apple, particularly Winter varieties; and this opinion was strengthened by all attempts that were made to introduce the latest and best Northern varieties. A brief history of my own experience will be but a repetition of hundreds of other individuals' attempts, and will illustrate this fact.

In the year 1834 I commenced an orchard in Macon county, N. C., 20 miles North of the 35° of N. L. Being remarkably fond of good Winter Apples, I turned attention, particularly, to them; procuring my selection from the North, according to the direction of Cox and Kenrick, the only authorities at that day who had written books on Fruit Culture. Well, I made a complete failure, for, when my trees began to bear fruit, it matured and fell from the trees long before the proper time, and though they were an excellent collection of Autumn Apples, there was not a good Winter keeper amongst them.

About this time Mr. Downing published his treatise on fruit culture, in which he said so many fine things in favor of Pell's far famed Newtown Pippin, that I again entertained a hope that I would have good Winter Apples, and I decapitated a good part of my trees and regrafted with them. The third year thereafter demonstrated the mortifying fact that it was not an indiginent of our Southern climate, it casting both its fruit and its leaves long before frost. This transpired about the year 1846, and in the Winter of that year, in Athens, Ga., I met with James Camack, Esq., then Editor of a Southern Agricultural journal. In relating my mortifying failures in fruit culture to that gentleman, he informed me that the recital of my experience with Northern varieties of Winter Apples, was a precise history of his own—that he had tried every variety and failed in all. "But," he remarked, "Mr. M'D., let us not be discouraged, for it is yet in our power to have as good, and I think better Apples than they have at the North; but before this takes place the South must have a Pomology of its own. That such a Pomology can be organized, I am certain, from this fact;—I live here where our market is supplied with fruit from your Cherokee country in Western North Carolina, and I have seen seedling Winter Apples, which had their origin amongst the Cherokee Indians, equal to any Apples I ever saw at the North; and I have now in my house, Apples that I bought from a wagoner living in your county, which to my taste, are far superior to the "Newtown Pippin." This remark was followed by the exhibition of some of the Apples, and they proved to be what now stands at the head of the best of my collection of Southern Seedling Apples, under the name of Camack's Wintersweet, in compliment to my friend who first directed my attention to it.

To be brief, I must here say, that I immediately commenced acting upon Mr. Camack's suggestion, and amongst old Cherokee seedling Apple trees—(the Cherokee Indians propagated trees no other way than by planting the seed,) as well as other Southern seedlings, I have succeeded in conferring on Southern Pomology a list of names of Winter Apples, which both as to their highly aromatic taste, as well as late winter keeping qualities, cannot be excelled by as many varieties of Winter Apples in the United States.

My new varieties, as I dragged them from their secret abodes, I wrote out the history of each, and gave it a name, generally the name of the stream on which it originated; but sometimes the name of the Indian who was the occupant of the old field where it grew; I then sent a good specimen to my worthy friend J. Van Buren, Esq., of Clarksville, Ga., who is an excellent artist, and he takes it down in his book of colored drawings where it looks as natural and beautifully tempting as those on that tree which were so alluring to the eye of our own good old Grandmother.

Mr. Van Buren has also made an extensive collection of Southern Seedlings, and has ransacked almost every nook betwixt Virginia and Florida, and has many good varieties, which will bear transplanting much farther South than any amongst mine. He also keeps a nursery, in which he has grafted extensively from all my varieties. I keep no nursery, nor have I the least pecuniary interest in Mr. Van Buren's, but mention the fact of his having a nursery, that any individual wishing to cultivate the Apple at the South may be supplied with trees of varieties that will succeed in our warm climate. As all my new Apples have, as discovered, been published and described in some Agricultural or Horticultural journal, I will close this communication with a list of their names.

If you should have anything of a flattering appreciation of my efforts to contribute something of utility to your department of science, I may, perhaps, continue my remarks on subjects connected with my favorite pursuit, and make some suggestions in relation to planting an orchard—the most suitable soil, what kind of exposure, the best shape to give their tops, as well as the best method of preserving them from the ravages of the tree-louse, and all other pernicious or destructive insects.

The following list consists entirely of early Winter and late keeping Apples. I pay no attention to Summer and Autumn varieties. I pledge my name that there is but one Apple in the list that is not of the very first class, and this exception is where I have given countenance to a new seedling discovered in 1855, to please my friend Van Buren. It is a perfect beauty and is 18 inches in girth; but its flesh coarse and austere.

1. Camack's Winter Sweet,
2. Maverick's Winter Sweet,
3. McDowell's Winter Sweet, } Whites.
4. Cullasaga,
5. Nickajack.
6. Ducket, (white.)
7. Alarkee.
8. Equinetely.
9. Cullawhee, (18 inches,)
10. Junaluskee.
11. Watauga.
12. Tillequah.
13. Chestooah.

All of Cherokee Indian origin, save the 4, as marked. Cullasaga was originated from the seed of a Horse Apple planted in a garden by Miss Ann Bryson, on a river called Sugartoron, but in the Indian language named Cullasaga. Keeps through dog days, took a premium at a fair in Georgia as the most aromatic Apple South.

Besides the above, I have two new Apples, which are first class, but as yet have had but one of them painted and neither of them named, described and published. For a temporary name I call one "The Great Unknown;" the other nothing but "my 1858."

Respectfully,
SILAS M'DOWELL.

◆

Care of Bees.—Bees should be examined once a week all winter, to see if all is right. This is much easier than to attend to pigs, sheep and cattle three times a day, which no good farmer complains of. What is termed luck with bees is another name for careful and skillful management.

# FOR THE LADIES.

## Floriculture.

### HINTS FOR THE MONTH.

Annuals, if not already sown as recommended last month, should now be attended to. In sowing Mignonette, a light, rich sandy earth is best, as the delicious fragrance of the plant is much greater than when cultivated in ordinary garden earth. A shady situation is best.

Roses.—These plants should now be relieved of all dead and superfluous wood and tied to neat stakes, in whatever form fancy dictates and the nature of the plant will allow. This would have been the work of last month, had not the Spring been so late.

Dahlias, may now be divided at the roots, where an increase is needed. If they have been left in the ground during winter, they should be examined, the earth made rich around them, and only one shoot or branch allowed to come from the root, which may be supported by a neat stake.

Greenhouse.—The inmates of the greenhouse should now receive an abundance of air and be sprinkled freely with a syringe—except those in bloom—every evening, half an hour before sundown, and the house closed for the night. Air should be admitted by degrees in the morning, and taken off in the same manner in the evening. When the green fly makes its appearance, fumigation should be resorted to. Do not let the tobacco blaze. Geraniums and other plants intended for bedding out in the flower garden, should be hardened by degrees, by being placed in the coldest part of the house. It will not be safe to plant them out till next month.

WM. H. HAMILTON, Florist.

## Luxuries all can have.

Plant a few currant and gooseberry and raspberry bushes—a few strawberry vines—and some choice cherry, peach, pear and apple trees—not forgetting a few grape vines, the whole not occupying more than a half acre of ground—and you can have fruit luxuries enough for family use, for nearly half the year. The currants will yield from 1st of June to the middle of August. The strawberries from middle of June to the middle of July. Then your raspberries will come on and last for three weeks. Then your fine cherries and luscious peaches; now your delicious pears, and then the excellent apples which will supply you with fall eating and with putting up for winter use.

These are some of the enjoyments which a small plat of ground thus employed, will afford a family. And their cost is a mere trifle.

## The Garden.

A lady friend told us a few days since, that she had tried a new experiment with her Irish Potatoes this year, by covering them with wheat bran, and asked our opinion as to the propriety of the experiment.—The suggestion caused us to make an examination among our Agricultural exchanges, when we found that many of them recommend wheat bran as a most valuable garden fertilizer, and in the culture of the Irish potato it is invaluable.

But we found our fair friend had reversed the manner of using it, from the recommendations of our exchanges; She had the bran put *over* the potatoes, whereas those who have tried the experiment advise that it should in all cases be put in the soil below the seed.

In manuring rows of vegetables with wheat bran, first open a deep furrow and sprinkle bran in the bottom, (one quart to the hill)—cover the bran with earth, and over it plant the seed. It is fine for cabbage, English peas, snap beans, and all plants that do not like highly stimulating food

At one dollar per hundred (and it can now be purchased for less) it is said by the "Cotton Planter" to be cheaper and safer than guano for the garden.

There are other domestic manures, that should be saved and applied that are now thrown away. The scrapings of the hen-house is the best manure for the onion bed. It should be thoroughly pulverized and mixed with ashes. The contents of the wash tub should be put on the cabbage square.—It is both *meat* and *drink* to the plant. If the garden be sandy, clay will be a fertilizer; if clay, sand will be found to fertilize by loosening the clay and permitting the roots to run in search of food.

# MECHANICAL.

## An Ingenious North Carolinian.

Among the thousands who now throng the Federal Metropolis of the United States, is a Mr. GRAY UTLY, of North Carolina, well known as the inventor of several original designs for cheapening and facilitating labor. He is seeking a patent for a breach-loading cannon upon a new plan, by which as many as twenty-five or more charges can be fired continuously in a single minute, with perfect ease, certainty and safety. He obtained one day last week, as we learn from a correspondent of the Richmond *Whig*, a patent for an improved plough, in which the subsoil, the turning, and coulter ploughs are combined, so as to work jointly or separately.—The combined plough is exceedingly simple in structure, and is said to work admirably. Mr. U. is also engaged in perfecting an invention by which mere *weight* is substituted in place of costly horse, steam, or water power. Should this last scheme succeed, it is destined to produce a great sensation in the industrialand mechanical world, and to realize an immense fortune for the inventor. It is gratifying to know that Southern inventive genius is at last beginning to compete successfully with that of the North.

We unite with our friends of the Wilmington Herald, in expressing the great pleasure with which we notice, that in this age of progress, scientific improvement and advancement in the mechanic arts, our old State is not behind her sisters. That her daughters are as lovely, and inteligent, her sons as industrious, the soil as fertile and her minerals as valuable as can be found anywhere, is beyond dispute, and it is gratifying in our researches through our exchanges from a distance, to find the familiar name of an old friend or acquaintance, whose genius has elevated him to a proud position, figuring conspicuously as a benefactor and valued citizen of the home of his adoption. As we have said before, we intend to record every evidence of the success of North Carolinians whether at home or abroad. In our last, we gave notice of several recent inventions by citizens of our State. We are again gratified to find the name of another North Carolinian connected with several important inventions recently deposited at Washington.

## Receipts for the Planter.

The Planter is published strictly upon the *Cash in advance* principle—and is sent to none except those who have paid for it. We deem it useless, therefore, to publish our monthly receipts. as the *regular* reception of the paper, is of itself a receipt to the person to whom it is addressed, that the Publisher has been paid for it.

Subscribers need not fear any accounts being presented against them for the Planter. We enter no names on our books unless the money accompanies them. We then mark them paid. At the end of the time paid for we shall make a CROSS MARK on the paper; and if the money be not sent for renewal, the paper will be discontinued. We keep no *debit books* for the Planter.

"THE SPIRIT OF THE AGE,"

**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*

**30 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

Col W A Lenoir
Fort Defiance
Caldwell

MAY NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO

**THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE, FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.**

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

**A. M. GORMAN, Publisher, Raleigh, N. C.**
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., MAY, 1858. NO. 5.

**THE NORTH CAROLINA PLANTER,**

Is published monthly, in Raleigh, N. C., at ONE DOLLAR A YEAR, ☞ *payable invariably in advance.* ☜ From this rule there will be no deviation.

No copy will be sent unless the cash accompanies the order; and it will be promptly discontinued at the close of the subscription year, unless the money is forwarded for renewal.

Gentlemen of ability and experience will conduct the PLANTER. All communications to be addressed to A. M. GORMAN, Publisher.
Raleigh, N. C.

## AN ESSAY

## On Horizontal Plowing, and Hill-Side Ditching.

BY NICHOLAS T. SORSBY, M. D., OF ALA.

[Copy Right Reserved.]

This Essay was prepared for the North Carolina Agricultural Society, and received the Premium of Fifty Dollars, offered for the best Essay on the above important subject.—It is one of the ablest and most comprehensive papers ever written on Horizontal Plowing and Hill-Side Ditching—and will be read to great profit, by the Farmers of the country generally. We bespeak for it their most attentive examination.—EDS. N. C. PLANTER.

### PREFACE.

This Essay was written in compliance with the demands of the North Carolina State Agricultural Society.

The writer having felt the need of such information, in days past, feels he would be uncharitable and ungrateful to withold, and not impart his knowledge on the subject, to his brother farmers.

He has endeavoured to serve them in a feeble manner, in a matter deeply concerning their pecuniary welfare, and tried to arrange the subject in a systematic form, and explain the different methods of the horizontal culture, so that the humblest mind can understand, and appreciate them.

Each article is separate, and distinct from the others, and yet are connected together by the general bearing of the subject.

Should this small effort, in behalf of the soil of North Carolina, meet with the approbation and requisitions of the members of the Agricultural Society, and receive the careful perusal, study, and application of its principles to the soil, by the farmers and planters of the State, the writer shall feel that his labor is not lost, and his talent not buried in oblivion.

## INTRODUCTION.

It has been but a few years, since the subject of this Essay, was brought to the notice of the American farmer.

It now occupies an important, and a prominent position, among the scientific operations of the Southern Farm.

It may be considered as a new branch of agricultural science, founded upon correct and well established principles of the sciences of Engineering and Hydraulics; and essential to the welfare of the farmer, to the preservation of the soil, and to good husbandry.

Forced, almost of necessity, and the strong sense of self-interest and foresight, a few intelligent minds have been brought to discover the urgent need of reforming the old destructive system of plowing in straight-rows up and down hills, and of substituting the better mode of horizontal culture.

The absurdity of the old method is, really, a subject of astonishment and mortification, to those who practice the new methods. The arable lands of the South, have been nearly exhausted by it, and a careless and wasteful culture.

The beauty and simplicity of the principles and practice, as well as the advantages of the new methods, can only be realized, and brought home to the farmer and planter, but by observation, study, and practice, and when once understood, they will wonder at their past folly of land killing, and grieve to know they practiced it so long, when a different, and a better system, is so easily learned and pursued.

When we reflect upon the disasters to the soil occasioned by the pursuit of the old method, and see the apparent apathy to, and indifference with which the more perfect and better system is viewed by some intelligent farmers and planters, at the present enlightened era, and golden age of agricultural science, we feel alarmed for them, for their lands, and the succeeding generations.

What a poor inheritance to hand down to an industrious son, an old dilapidated homestead, with an old worn out, galled and gullied farm! Think of it, farmers and planters!

The very sight of decay all around, excites in the mind of the young man, disgust, despair, a disposition to abandon the old place, once so dear to him, and the family, now so much abused, and seek a newer and better place, richer land, among strangers. He has no desire to cultivate the worn out old fields, and perhaps there is no new land to clear. The old method of plowing up and down hill, has much to answer for; it has driven many a young man to the South-West, and perhaps, eventually, to prison, or the gallows, who might have been a useful citizen, could he have remained at home, and made a living.

Whilst the *horizontal culture*, and the *ridge* and *furrow system*, are attracting the attention, and being adopted by intelligent planters and farmers, its principles must be studied scientifically and practically, and new discoveries in the art applied, tested, and settled in the minds of men, or else there will be no end to the diversity of opinions that may arise, and lead to discussions that may retard the advancement of the new science.

It would require more time and space to elucidate the different methods of the horizontal culture, as fully as some men may desire, perhaps.

We have endeavoured to simplify it, and should some of my readers not comprehend it, perfectly, all that we can say to them is, study the principles laid down here, and then take the *level*, and follow the plumb, and it will lead them over more tortuous and obscure lines than we have penned here, and a few horizontal rows run with patience and care, will teach them more about it, than was ever dreamed of in our philosophy.

Our aim has been, in writing this Essay, to collect together our ideas on this subject, to compare them with others, and deduce from them correct principles, and upon these principles establish with fidelity, practical rules, and thus accomplish by a general survey of the subject, and a brief enumeration of the details founded upon our own experience and observation, all that we think the State Agricultural Society of North Carolina, requires of the writer.

## HISTORY OF HORIZONTAL CULTURE.

We regret to state that we have not been able by a careful research of all the Agricultural works that we have been able to examine, in the English and French languages, to find the origin of this system of culture.

Mr. Thomas Jefferson, who was a close observer of improvements in Agriculture, in a letter dated "Monticello, 6th March, 1816," says "My son-in-law, Colonel Thomas M. Randolph, is, perhaps, the best farmer in the State; and by the introduction of the Horizontal method of Plowing, instead of straight furrows, has really saved this hilly country. It was running off in the valleys with every rain, but by this process we scarcely lose an ounce of soil.

"A rafter level traces a horizontal line around the centre of the hill or valley, at distances of thirty or forty yards, which is followed by the plow; and by these guide-lines the plowman finishes the interval by his eyes, throwing the earth into beds of six feet wide, with large water furrows between them. When more rain falls than can be instantly absorbed, the horizontal furrows retain the surplus until it is all soaked up, scarcely a drop ever reaching the valley below.

"Mr. Randolph has contrived also, for our steepest hill-sides, a simple plan which throws the furrows always down hill. It is made with two wings welded to the same bar, with their planes at a right angle to each other.—The point and the heel of the bar are formed into pivots, and the bar becomes an axis, by turning which, either wing may be laid on the ground, and the other then standing vertically, acts as a mould-board. The right angle between them, however, is filled with a sloping piece of wood, leaving only a cutting margin of each wing naked, and aiding in the office of raising the sod gradually, while the declivity of the hill facilitates its falling over. The change of the position of the share at the end of each furrow is effected in a moment by withdrawing and replacing a pin."

It seems Colonel Randolph introduced this method of plowing into Virginia, previous to 1816, as Mr. Jefferson states, he was acquainted with it two or three years previous to writing this letter.

This is the earliest notice that we have seen of the use of the horizontal culture, as practiced in the South at the present day.—It would be gratifying to know from whence he introduced it, and where it originated.

In "Taylor's Arator," published in Virginia the beginning of this century, on the subject of plowing hilly lands, it is stated "that such lands will admit of narrow ridges, as well as level, by a degree of skill and attention so easily attainable, that it has existed in Scotland above a century past under a state of Agriculture otherwise execrable, and among the ignorant highlanders. It is effected by carrying the ridges horizontally in such inflections as the hilliness of the ground may require, curved or zig-zag, preserving the breadth. The preservation of the soil is hardly more valuable than that of the rain water in the successive reservoirs thus produced to refresh the thirsty hill-sides, instead of its reaching to, and poisoning the valleys."

It is very strange, if this system was pursued in Scotland so very long ago, that there is no mention made of it in English works.

During an extensive tour, and residence of over three years in Europe, from Great Britain to Naples, Italy, through Holland, Belgium, France, Switzerland, and parts of Germany, we never saw, heard or read of its being pursued in any of those countries, as it is done here, and we cannot conceive how it could have ever been practiced in Scotland and not kept up now-a-days.

In our travels throughout the United Stetes, we have seen it pursued from Mississippi to North Carolina. We have been to Monticello, several times, when a student at the University of Virginia, and though remarking the productiveness of the soil there, and around Charlottsville, we were too young to notice the mode of culture, but we are sure we never saw a rafter-level, or any other level applied to land in Virginia. Had we seen it we should have noticed it, because we had followed it before we went there to school, in 1836.

In "Thair's Principles of Agriculture," a standard German work, in speaking of plowing ridges, he says, "the most advantageous disposition of them that can be made on an inclined surface, is to give them a horizontal or standing direction"; but he says nothing more on the subject. Had he been acquainted with the method as pursued in the South, he would have written considerably on it.

We are inclined to believe the Horizontal system of plowing, is of Southern invention. We are astonished at the fact, since the southern planters and farmers have the reputation of being such careless, and wasteful cultivators of the soil.

We consider it the most important discovery of the modern agricultural era. So important is it to the South, and to the soil in every part of the world where it rains like it does here, that the discoverer of the method deserves the lasting gratitude of the Southern people, and a place upon the tablet of memory next to that of the father of our country.

Hill-side ditching and guard-drains, were discovered subsequent to the origin, or introduction of the horizontal system into Virginia. They were first introduced into that State soon after the introduction of the horizontal method, about 1815 or 1816; by whom, we do not know.

The first written notice of the horizontal culture, and hill-side ditching, that we ever saw, was in the pages of the Southern Cultivator. Major E. D. W., our step-father, first introduced the method of Horizontal Plowing on the level system, into this county, in the Spring of 1834. He had read a notice of it in some paper, which induced him to try it on some hilly land at the DIAL PLACE. He used the rafter–level, and plummet–line, and ran off rows to be plowed four feet apart into beds for corn and cotton. We were a boy then, and carried the hoe and made the chop marks for him. He was so well pleased with the results of it, and with his experiment, that he has continued it ever since with great success on two plantations. He has a thousand or more acres under the plumb. He has tested it thoroughly, and has preserved the fertility, retained the soil, and improved his lands, aided by a proper application of manures, under a severe course of cropping. Without this system, all the manure he could make would not preserve half of the land in its present state of fertility for five years. He would as soon abandon planting as to abandon the horizontal system of culture.

We have assisted him in the work a good deal, and induced him to try guard-drains and hill-side ditches about 1851, or 1852, in order to lighten his labor and lessen his care and attention to it, as he is getting old and the confinement to the field and exposure to the cold during the winter and spring, are injurious to his health. But, he says, "he could dispense with the drains and ditches if he could attend to the plowing in person every Spring, and direct the work and correct the errors of the previous year's work.

An old negro horizontaler lays off the rows, and attends to one plantation where there are between six and seven hundred acres under the plumb; and manages it astonishingly well for a man of his understanding.

His lands were originally of a good quality, and are of a mixed character. On one plantation, the grey and mulatto sandy land prevails, the subsoil being yellow and red clay a foot and eighteen inches originally, in parts of it, beneath the surface soil. The balance of the land is a chocolate loam on a red clay subsoil. Some of it is considered stiff red clay land. On the other plantation, the chocolate loam prevails with a close, stiff red clay subsoil, requiring a long and sharp pointed plow to penetrate it when moderately dry. The rest of the land on this plantation, is grey and gravelly sandy soil, loose and porous. Most of the land on both places, is gently undulating ridges.—Some of it hilly, and some knolls. The stiff red clay land is the most difficult and expensive to cultivate, and is the best land for grain. It is also the most difficult of his land to manage on the level method of culture.

I took my first lessons under him in the science, and owe him a debt of gratitude which can never be paid. He taught me the level culture, and I taught him the grading method. I commenced planting in 1844, in Hinds county, Mississippi, near Jackson, in copartnership with a brother. The *level culture*, No. 1, and the *grading method*, No. 1, both combined, without drains and hill-side ditches, had been in use a few years on that plantation. The soil, a close, tenacious, marly clay, of a yellow color, changing into an ashy colored soil, when thoroughly disintegrated and cultivated a year or two. I was partial to the level culture, and he to the grading method. I found out after a better acquaintance with the land, that the level culture retained the water too long, and made the land too wet for cotton. The grading method drained, but washed the land a good deal. After testing both methods to my satisfaction, I gave into his views rather from an avaricious motive than otherwise, to make better crops, though at a sacrifice of some land that took to the streams and disappeared.—From one to three inches fall were given to each row, when practicable, and the short inside rows plowed on a level. The land was rolling, and drains between the ridges conveyed the water into ditches and branches. We continued both systems until I left in December, 1850, and moved back to this place. The grading method has been kept up by him. I commenced a mixed system here in 1851, and have practiced both of them to a certain extent.

My land is chocolate and grey sandy land, on a red, and yellow clay subsoil. The grey land is of a fine texture, and much of it runs together and bakes. The chocolate land is loose and porous. It is generally a little undulating, some rolling, and some flat basins and ponds. It requires much ditching and surface drainage, and some under–draining. Forest growth, pine, oak, hickory, chestnut and poplar, with a variety of undergrowth.

My experience and observation teaches me, that the *level culture* is the best method ever discovered to prevent arable land, of the majority of soils in the South, from washing by rains, but not the best always to secure good crops. The grading method is the safest as a general rule for the culture of cotton, and can be pursued to great advantage on many soils that could be cultivated well on the level method, when one is willing to lose a little soil to make a better crop, by draining the land. No one system of culture is, then, applicable to all soils ; and on large plantations of mixed soils, both the level and grading systems should be applied. He is a fortunate man who understands the different methods well enough, to apply them to the best advantage to the different soils, on a large plantation. It requires close application to field study, a good knowledge of the geology of the soil and the agricultural character of the land, with years of experience, to know how to cultivate land to the best advantage to the soil, and to the increased size of the purse.

## SECTION I.

### Definition of Horizontal Culture.

*Horizontalizing, Circling, and Leveling land* are different terms employed by *Agriculturists*, in the *South*, to mean the same thing ; viz: cultivating land in parallel lines run by a leveling instrument to direct and control rain water with the plow.

## SECTION II.

### Its Objects.

*The objects of the System of horizontal culture* are, to irrigate, to drain, and to preserve arable soil. in the simplest and most economical manner.

1st. By collecting, maintaining, and distributing rain water, on the surface of arable land, it effects natural irrigation.

2. By conveying it away, by artificial channels, it effects drainage.

3. By a proper system of irrigation and drainage, the soil and the food of plants are retained, and the fertility of the land is preserved.

## SECTION III.

### General Considerations.

Rain water being a solvent of the food of plants, and the medium of supplying them with many of their elements, the system of horizontal culture teaches us to control, and diffuse it in the soil, and distribute it in such a manner that the food of plants it contains, may be made available to the utmost degree, in promoting their growth ; and, when it exists in excess, to remove it without injuring, or washing away the soil.

Hence, we conclude that, a correct system of manuring, and improving land, depends greatly upon a proper regulation of water by the horizontal culture.

We perceive, then, that the horizontal culture is a beautiful branch of the science of Agriculture ; that it is a mixed art, a combination of irrigation, drainage, and manuring. We cannot therefore, study it well, appreciate it properly, and practice it successfully, without some knowledge of agricultural engineering, of the geology of the soil, and hydraulics, and the application of them to irrigation and drainage.

We can then realize and appreciate the several advantages and connections of these branches of science with each other, in developing the chemical and physical properties of soils, and in the improvement of the fertility of land. To practice it scientifically, and successfully, we must study, and understand the geological formation, and the agricultural character of the soil, and ascertain by observation and experiment what plants grow on it best, and are most profitable to cultivate.

Drill-husbandry, that is, the cultivation of crops in drills, by the ridge and furrow method, is indispensable, and the check and hill-culture are inadmissible, except on level lands, as a general rule, by the system of horizontal culture. Of course, the broadcast method can be employed, as well with one method as with the other. The horizontal culture, by the ridge and furrow method, conflicts with the practice and opinions of many farmers, in the oldest of the Southern States, who advocate the check and hill culture. But, an acquaintance with the horizontal culture, changes their practice and opinions.

## SECTION IV.

The Different Method of Horizontalizing Land, are divided into two principal systems: viz:

1st. the Level Method of Culture.
2. the Grading Method of Culture.

The Level Method, (or Irrigating System,) is divided into two methods ; viz :

1st. Horizontaling with an instrument, on the level culture, without the aid of guard-drains, and hill-side ditches ; and,

2. The level-culture, aided by those drains and ditches.

The Grading Method, or Draining System, is divided into four different systems, viz :

1st. Horizontaling with an instrument, giving a grade to the rows, without the assistance of guard-drains, and hill-side ditches.

2. With a grade to the rows, the same as that given to the drains and ditches, accompanied by those drains and ditches.

3. With a grade given to the rows so as to empty their water into the drains and ditches.

4. The straight-row method, the rows run

up and down hills, and empty into hill-side ditches.

Besides the above methods, there is the old mode of horizontaling with the eye, without the aid of an instrument, or guard-drains, or hill-side ditches.

### SECTION V.

#### THE DIFFERENT METHODS EXPLAINED.

The old method of hill-side plowing by running the rows around hill-sides with the plow, directed by the eye, is mere guess work, and only an approximation to accuracy, and of course is very imperfect.

It is done with the object of retaining the rain water in some instances, and of removing it in others; in either case, it cannot effect the object in as perfect a manner as the new methods of level and grade work done on correct principles, by the leveling instrument.

When the object is to retain the rain water, it answers tolerably well in some countries, on porous, poor, sandy soils, where the showers are not frequent and are light, and where the leguminous crops are cultivated mostly on high beds and lands, as a substitute for artificial irrigation, and where the spade and hoe are used, generally, for the purpose of forming the ridges.

When adopted to drain hill-sides by the plow, unless the soil is not disposed to wash, it is very liable to do more injury to the land by washing it away than benefit by removing the water.

It should not by any means be resorted to now, since we can substitute better methods for it. It is the first step towards the horizontal culture from the straight-row method; and was perhaps invented for the purpose of retaining instead of removing water.

#### 1. LEVEL CULTURE OR IRRIGATING SYSTEM.

By this method the rows are laid off with a leveling instrument on a perfect level, and the land cultivated without the aid of guard-drains, or hill-side ditches.

Here, science steps in to correct the imperfections of the eye.

It is impossible to lay off a level row by the eye. The most skilful horizontaler cannot judge with accuracy the degree of inclination of lands, and discover all the inequalities of surface well enough to horizontal land on a level by the eye. But, with a *rafter-level* properly made and adjusted, it can be done, on an even, or uneven surface, with perfect accuracy, on a dead level: and if the land be properly plowed the rows will hold all the water that falls on them.

It is the best and only system ever invented to prevent comparatively level, and gently undulating lands, from washing.

It is intended to retain all the water that falls on land just where it falls: this is natural irrigation. We all know the value of water for the nourishment of animals and plants. They cannot live without it. Crops often fail for the want of it. By this method none is wasted. Enough water is absorbed during winter and spring rains by land cultivated on this system, to almost make some crops, especially when aided by light summer showers, that would fail to do so cultivated by the grading method. This method is most applicable to all poor, thirsty, porous sandy soils, whether they rest on clay or sandy subsoils, and to many varieties of clay soils not too compact and retentive of water.

We think we may say with truth, that we never knew, in this country, but one kind of clay-soil, on uplands, that this system was not applicable to, on the grounds of making it too wet for profitable culture.—That is the fine, close, tenacious, marly-clay soils, resting on a retentive yellow clay subsoil, of the black-jack, post-oak, and hickory ridges of Hinds, Madison, Yazoo, Carrol, Holmes, Warren, and other parts of Mississippi.

Besides this kind of soil to which the level culture is objectionable, are the compact red and yellow clay soils of some hilly lands, and the blue and white clays of lowlands.

The red and yellow clay lands may be cultivated by it, if they admit of subsoiling to advantage. It is seldom that the level culture is objectionable for corn and small grains, and the root crops. But when it causes the soil to become too wet during the cultivation of crops, to plow well, and hastens a rapid growth of grass and weeds that destroy the crops, it is an evidence that it should be abandoned, and a grading-method substituted for it.

#### 2. LEVEL CULTURE, WITH GUARD-DRAINS, OR HILL-SIDE DITCHES.

The rows are plowed on a level, and guard-drains, or hill-side ditches are added, with a slight grade to correct the evil of the excess of water, and remove it, should the ridges break. Some soils, such as close tenacious clays, though plowed deep, may absorb a great deal of water during heavy and repeated rains, until the plowed soil becomes well saturated; the water will then sink until it reaches the impervious strata, on steep hill-sides, until it accumulates in such quantities as to break the ridges, and flow downhill, carrying the soil with it.

Again, in clay soils, plowed shallow, a heavy rain succeeding another heavy rain, that had run the land together, and baked by the sun, and closed its pores, may cause the water to accumulate in level rows until the volume and weight of water makes a breach, and some of the ridges give way, and the water is precipitated from row to row till it reaches an outlet.

A mole, a stump, bad plowing, the wheels of a cart, or waggon, and other causes may break the ridges, and cause the land to wash. To prevent such a disaster, guard-drains, hill-side ditches have been invented, to aid and protect the level culture, and to correct the ignorance and errors of the inexperienced horizontaler, and save his time, labor, and soil. But, in many instances, they encourage careless work, and are sometimes evils to the system. They should not be relied upon too much; the remedy is sometimes worse than the disease.

### 1st. The Grading Method, (or Draining System.)

The great object of this method is surface drainage, of arable land: here it is divided into,

1st. Horizontaling with a grade given to the rows, without the aid of guard-drains, and hill-side ditches.

Every row is designed to drain itself, and of course the other drains are unnecessary. It is a kind of self-sustaining system, and a substitue for straight rows. It is beautiful in theory, but difficult to practice in a general system, on all soils. Some fields, and parts of fields no grade is necessary, whilst, different grades are required according to the inclination of land, and the physical properties of soils, and the length of rows. The length of rows are very irregular by this method, and short rows emptying into long ones, pouring their water into them, force them to wash into gullies. Hence, it is imposible to keep the soil from washing by this method. It should be confined to close clay soils. This method, combined with level culture, answers a better purpose.

2. Horizontaling with a grade given to the rows the same as that of guard-drains and hill-side ditches. This methodwas adopted, doubtless, to correct the evils of the preceding method.

When the drains are well made, they check the flow of water descending down the hills from the broken rows, and thus convey it away and protect the land beneath them.—Without their aid, much mischief might take place, but if the work by the preceding method be well done, there is no need of the drains to aid it. Imperfect work then, excuses their employment. But they are indispensable evils to the system they are used to protect, and are much employed.

3. Horizontaling with a grade given to the rows so as to empty their water into guard-drains, and hill-side ditches.

This is truly a draining process, employed on clay-uplands, and low-lands, and answers a good purpose when the rows are not too long, and the fall is correct. Of course the drains and ditches require considerable fall, and to be very capacious. It is popular with those planters who have clay soils, and trust much to overseers, and negroes, and kind Providence for gentle showers, to make them crops. But overseers make mistakes, plowmen do bad work, and the clouds pour down heavy rains, and the soil, as it were, melts and runs rapidly away. To answer a good purpose, the overseers, plowmen, and drains require strict attention, or the land will be injured by this method.

4. The Straight row Method, with Hill side ditches. The ditches in this instance are cut on hill-sides with considerable fall and the land is plowed on the old straight-row method, the plowman raising his plow over the ditch banks as he passes them. It is evidently a troublesome business to raise the plow over the ditches, and keep them clean. If the soil be sandy, and disposed to wash, the ditches must be deep and large, the fall great, and the plowman careful, which is contrary to negro character, or else every heavy rain will fill up the ditches with sand, break their banks, and cut the land into gullies and galls. However, it has the recommendation of being simple, and better than the old up and down hill mtehod, without the protection of ditches.

Experience will soon teach any one that it is a bad system for hilly lands: for low-lands it answers a good purpose for quick and effectual drainage, and enables some low-lands to be cultivated, that could not be without this kind of drainage.

The rich low wet-lands, and the rolling up-lands, in the prarie or lime lands of Alabama and Mississippi, when too wet, this kind of expeditious drainage is the sine qua non, the proper method to remove the water, and dry the land in time to prepare it for a crop, and to save the cotton from damage by excess of water.

## SECTION VI.

**Philosophy of the Level Method.** It is true there are deep, sandy, alluvial soils that absorb all the water that falls on them during the heaviest rains; but again, there are other soils when cultivated on the straight-row method, that are injured by the irregular distribution of water, one part of a field being drained too much, whilst the land below it is being drowned; thereby, both parts sustaining an injury. The crops on such land grow and mature irregularly in consequence of the irregular distribution of the water, and the culture. The level culture corrects these evils. It retains the water and soil in its proper place, and when the land is cultivated alike, all remains nearer the condition of dryness, and the crops grow off more uniformly on the same quality of land and mature nearer the same time.

Should the land be manured, the elements of the manure remain where deposited, and not removed by the first rain to the nearest ditch, or branch. It irrigates and preserves the soil, when properly done. It is the best method to employ to aid in restoring exhausted lands.

It is very difficult to lay down any set of rules by which to do the work; because, the physical properties of soils are such, and the inequalities of land vary so much, no one rule or set of rules, would apply to any great extent of surface. One part of a field might require the level culture, and another part the grading method. Hence, we are forced to adopt the one or the other, according to circumstances, and to do the work correctly, we must be acquainted with all the different methods.

It matters but little, where the work begins, or terminates in the field, so the rows are laid off accurately, on a level. The most important rule is to follow the level, let it lead to whatever point it may. It will run at every point of the compass, and form rows of every imaginable form and length, terminating any where in the field. It will lead the new beginner in the art, into a maze from which he can scarcely extricate himself, but he should have patience and perseverance, and all will come out right and no land be lost. He must be content to follow the level, but not try and make it follow him, and force it to any particular place of termination.—The only way to terminate a row at a certain point, is to start the level at that point: but ten chances to one, in returning, if the next row does not go off at an angle, and terminate at some distance from the first starting point. It is immaterial whether the rows be long, short, straight or crooked, or where they begin and terminate, so they are on a level, and the land be well plowed in rows or ridges. This should ever be borne in mind. The horizontaler will make mistakes, and be awkward at first, but will learn to do the work correctly.

## SECTION VII.

**Advantages of the Level Method.** This system is the best mode of cultivating land ever invented to prevent the devastating effects of rain water washing away the soil, and the manures put upon it. It enables the soil to absorb more water, and retain it better, and give it back to plants when needed more effectually and regularly than any other mode, thus preventing the deleterious effects of drought. It makes the soil more uniform in production; improves its fertility by retaining the manures; makes it easier to work, with less labor; causes the crops to grow faster, more uniform in growing and maturing; and as the rain water is evenly distributed on all parts of a field alike, when one part can be plowed, all can be done at the same time, and saves time turning around at wet land.

**Disadvantages of the Level Method.**—It seems in the order of things in this world, there is always an evil attached to almost every good. So it is in this instance; but we shall find that the disadantages disappear by practice, and are counter-balanced by the advantages. The disadvantages are, the unavoidable necessity of having so many short rows terminating at any part of the fields, forcing the plowman to turn around often, and lose time by so doing. This time however, is made up in the greater number of long rows. The injury to the crop, done by the plow. the mule and the hand in turning around at the end of the short rows. The difficulty at first of doing the work well, and of plowing the rows out without breaking up the work, and deranging the rows. The constant care, and attention, by the overseer or employer, to maintain and keep up the system. The necessity of using the ridge and furrow system, and of abandoning the check and hill culture.

## SECTION VIII.

**Philosophy of the Grading Method.**—Surface drainage is one of the most important operations connected with the tillage of the Southern soil. The value of the grading method cannot be over estimated. It has to contend with a troublesome element, that is a moveable element, always seeking its level, whose particles have a great affinity for each other, and running together whenever they can, thus accumulating in a mass, and increasing its volume and velocity when in motion. This element we wish to control with a level and the plow on the surface of arable land, and derive all the advantages of it we can as a feeder of plants, and at the same time, get rid of the excess that would prove injurious to the soil and growing plants. Nature does this for us in some soils, and teaches us how to do it in others. It sinks the water in porous soils, and stores it up for further use of plants; and removes it when superabundant, from undulating close clay soils before it does injury to the plants that do not require it, teaching us to level porous thirsty soils, and deepen and drain compact close soils. We should study carefully, the operations of nature, and apply its beautiful principles to the present subject, and conform them to the limited capacity of the uneducated minds of men. Very few fields of one hundred acres, have the same inclination of surface, and one variety and depth of soil. Land slopes in every direction, and each hill side, or plain of inclination, requires sometimes a different mode of drainage, and a different method of culture. In examining a field, we may find some acres requiring the level culture, others again one method of grading, and another a different method, and so on perhaps, through the whole list of the different methods of grading. It would be improper then, to employ one system alone, for every part of the field. The different methods should be applied according to the demands of the land. Science should guide us, and the one system horizontaler is led into error by efforts to apply it to all localities and inclinations of surface of land. We should be acquainted with all systems, and not make a hobby of any one. Better try first one, and then another, in experimenting, and select those that are best, and most applicable to the land. If we find a straight row more convenient, and better than a crooked one, if it be correct, adopt it without sticking to the idea that the horizontal culture consits of a system of crooked rows. Experience will soon teach the new beginner the degree of grade necessary to give to his rows and drains, and the number of drains or ditches to use to drain a certain area of land. The grade to the rows and drains, is governed by the kind of soil, the declivity of the land, the extent of the surface to be drained, and the method of horizontaling they are intended to aid. If the level culture, with drains, be adopted, a few shallow guard-drains with a fall of from one to two inches for every span of the level, may answer in moderately close clay soils; and less fall in porous sandy soils. If the grading method be adopted, the fall of the rows, and the drains, depends upon the kind of method of plowing used, and the nature of the soil cultivated. We should recollect, that the washing power of water descending a hill recently plowed, is dependent upon the declivity, and the length of the hill, the depth of the plowing, the character of the soil, and the quantity of water in motion.

Hence, the greater the fall, the larger the hill, the shallower the plowing, the more porous and light the soil, and the greater the volume of water, the more the land will be washed.

If the grade be not sufficient, and the dimensions great enough, they are apt to be choked and broken. A regular and proper grade must be given, and if an error be committed it should be on the side of too little fall. If the grade be too much, the rows will wash into gullies.

Guard-drains and hill-side ditches, should have grade and capacity enough to drain the land speedily and effectually, without having their sides and bottoms washed too much.—With a proper fall and dimension, they may be used to convey sand to fill up gullies and basins, and deposit it convenient to cover galled places.

## SECTION IX.

Advantages of the Grading Method.—It possesses all the advantages of surface drainage of arable soils in a simple and the best possible manner without doing serious damage to the land. It is the best method ever invented to assist in breaking up galls and gullies and filling up depressions in the land and the beds of old ditches and branches, as well as ponds, basins and bogs, and in aiding the plow and the hoe in restoring worn out soils.

It possesses also, many of the advantages of the level culture.

Disadvantages of the Method.—By careless construction of drains and neglecting to attend to them afterwards, they are liable to choke and break and wash the land below them into gullies. When they have too much fall, each row or drain is apt to wash into a gulley and do harm to land below their mouths by covering it with sand. They distribute water irregularly and where not demanded, drying the ridges and hills too much, and drowning the bottoms. Upon the whole, they are of minor importance, compared to the benefits of drainage.

## SECTION X.

Subsoil Plowing, means loosening the subsoil with a plow, without any mould-board to turn it up.

We have seen, Nature teaches us three important operations that are essential to the perfection of the horizontal culture, viz: to open, to deepen, and to drain the soil. An open, deep, and dry soil, we all know can be cultivated to better advantage and profit, by either the level culture, or grading method, than a close, shallow, and wet soil, by any method. The latter requires much labor, and time to open, deepen, and drain it, and if a good soil the labor pays; if a bad soil the labor is often lost.

Under the soil of some stiff red clay lands long cultivated, and originally good, there frequently exists a strata of compact clay and sand, called a hard-pan, formed by the treading of the stock and sole of the plow, cemented together by oxide of iron, clay, and fine sand. It exists sometimes in gravelly soils, but less frequent. Wherever it prevails it makes the land hard to cultivate, and it produces sorry crops. It is always on extremes of wetness or dryness. Such land is difficult to horizontalize.

Again, the plow forms on clay land, on the subsoil, small gutters or water channels into which the water sinks, accumulates, flows and washes the soil, obstructs the work of the horizontaler by breaking the ridges, and undermining the banks of drains and ditches when they are not made deep enough on hill-sides to extend below these channels.—The subsoil plow aids very much the horizontal culture by breaking up the hard-pan, the gutters or underground water furrows, galls and gullies, on clay lands; it opens, deepens, and pulverizes the subsoil, drains the surface soil by sinking the water and extending the area of air, manures, and the roots of plants, and thus producing a decided amelioration of the soil, and subsoil.

The best time to do the work is winter and spring, when the land is moist and soft, and when time can be taken to do it well. The most effectual plan is to open a furrow with a two-horse plow and a good turning mould-board, and follow in the same furrow with the two-horse subsoil plow, as deep as both plows can be drawn. If the time cannot be spared to run so many subsoil furrows, half the number will answer a good purpose. An expeditious plan for corn land is to open the water furrow between the ridges with a scooter plow, deep, and it followed with the subsoil plow; put in the manure, and bed out with scooters and shovels, finishing with a turning plow to make a good water furrow. When employed in lands for small grain, the subsoil plow can be seen to advantage in the old water furrow, which is the centre of the land when plowed out, and also in the new water furrow left open. We need not fear subsoiling clay and sandy soils when hard and compact, especially when old and much worn.

## SECTION XI.

Trench Plowing. This differs from subsoiling, by raising up the subsoil and mixing it with the surface soil, with a turning plow following in the furrow of another turning plow. It brings up the subsoil, disintegrates the hard-pan, and distributes them through the surface soil. It is of great assistance to the horizontal culture, by breaking up the gullies, galls and hard-pan, and thus lays the foundation of the process of restoring the fertility of worn out lands.

If the soil was of a good quality originally, and the subsoil of the same quality, trench plowing is of much advantage to the land to deepen and mix the two. But if the land be poor, and the subsoil poor red clay, the trenching should be done by a scooter plow following in the furrow of the turning plow, with the view of breaking up the subsoil, and pulverizing it, without mixing them too much. Mixing a poor clay with a poor soil, is bad policy, unless much manure is added to improve it. Subsoiling and trench plowing are often confounded with each other, but are quite different operations.

## SECTION XII.

Land-galls. These are abrasions of the soil, by rain water removing the soil off clay lands long cultivated by the old wash away method and leaving the clay exposed. They might be very properly called land-sores of an indolent character and hard to heal. The best way to treat them is to scarify them deep every spring, sow them down in peas, plow them in in the fall and sow in rye; repeat the same operation next year, cover them with all the leaves, stalks, and long manure of any kind, and the third year a tolerable crop of corn or cotton may be grown on them.

To manage them to the best advantage, they should be surrounded or cut off to themselves by guard-drains or hill-side ditches.

## SECTION XIII.

Gullies. These are open water channels caused by rain water and careless up and down-hill plowing. They are hideous objects to the eye of a scientific and practical farmer, and should receive the condemnation of all good husbandmen.

There are many ways of filling them up, but in doing so, sometimes two are made in place of one, unless it be properly done and aided by the horizontal culture. The land requires to be well graded and the direction of the water changed and not be permitted to flow so abundantly down the gullies as before. When they are less than three feet deep, they may be stopped and filled up in two or three years, in this way. Every twenty steps drive up stobs or oak boards, across and in the gully, close together, to catch and hold the dirt and water in part; then throw in leaves, tussacks of grass, corn and cotton stalks, pine straw, pine tops with the laps up hill, and up and down on each side of it, and drag in as much dirt as possible, with hoes. Sow them in peas and rye, and let grass grow in them. Plow horizontally across, keeping the same regular grade in passing them: to do so, the rows will make a curve up and down.

Large gullies will require more labor and time to fill them up. Cut a ditch across them at proper distances apart, and pile logs on each other in the ditch until the top log reaches above the banks of the gully. Now gather all the rubbish, stumps, stones, logs, leaves, pine saplings with the laps up hill, into the gully, and draw in all the dirt convenient and pack it against the logs and on the pine tops so as to make a dam. The drains and hill-side ditches can be emptied into them and supply dirt to fill them up.—Allow grass, weeds, peas, and small grain, to grow in them. In a few years they will be filled up, and bear some crop every year to hide them from the gaze of a neat farmer.

## SECTION XIV.

Guard-drains, and hill-side Ditches.—Guard-drains are shallow open water channels, made with the plow and hoe on arable land laid off with a leveling instrument, with a regular and gentle grade directed around undulating ridges and hill-sides, for the purpose of receiving and conveying away superfluous rain water.

Hill-side ditches are a variety of guard, or catch water ditches, but intended to operate more effectually than they, by having a greater capacity and grade, in order to remove a greater volume of water in a short time from hilly lands. They are a part of the system of horizontal culture, and are used to aid and protect it, and correct its defects. We may very properly term them the safety-valves of that system when properly constructed; and waste-ways when improperly constructed.

They are valuable adjuncts to the horizontal culture, and especially to the grading methods when made according to correct principles of hydraulics. On loose sandy lands they should be dispensed with whenever it can be done with safety, and as few as possiple be used, and they as far apart from each other, and as short, as the nature of the land will admit of, to effect the desired object. Clay-lands that have been plowed up and down hill in straight rows for years, and a good deal abraded and washed into gullies, require the drains and ditches to be well made. It takes two or three years, sometimes, to break up the old water furrows and gullies, and turn the course of the water, unless deep plowing be combined with the grading method. Guard-drains usually answer the purpose on gently undulating lands.

Hill-side ditches are best on hilly lands. Inexperienced horizontalers would do well in commencing the horizontal culture, to employ drains to protect their imperfect work. They should be made as short as possible, avoiding all abrupt curves or sudden bends, and directed around ridges or hills from a medium point, dividing the water and discharging it on both sides of the ridge or hill into a ditch, gully, branch, or outside of the field, where no damage to adjoining lands may be done. The fall should be gradual and uniform, and just sufficient to discharge the water without washing their sides and botttoms.

The ridge of drains and ditches should be determined by reference to a variety of circumstances, the combined influence of which may generally be estimated in practice, although not reducible to any very exact rules: viz: 1st. we must consider the annual quantity of rain; 2. the quantity which falls on the land during a heavy rain; 3. the nature of the soil as to porosity, or compactness; 4. the inclination of land; 5. the length of slopes, and extent of surface to be drained. Every horizontaler must take into consideration these things, and judge for himself.

A general and important rule as to the capacity of drains is, that they should exceed rather than be deficient of the dimensions ordinarily required to discharge the quantity of water for which provision is to be made.

A good rule by which the depth of drains may be estimated, can be derived from a knowledge of the character of the soil, and its action upon water. Thus, a light, deep, porous sandy soil, will absorb water as fast as it falls if it lies level; if undulating it will absorb it not so fast, and the deeper and more porous the soil and subsoil, the more and faster it will absorb.

On the contrary, a shallow, sandy soil on a clay subsoil, and clay lands, will absorb less water, more slowly, and more of it will pass off. It will follow the underground plow furrows when absorbed, and the drains should extend below these furrows to catch the water.

The close clay soils and the stiff lime lands absorb water slowly, and if they be deep, the drains should extend below the soil and nearer together than in porous soils.

The kind of drains to be used, their depth and distances apart, can be ascertained by experiment alone. It is safest for the new beginner to follow the example of those who have tested them on similar soil to his, and where found to answer well.

The following scale of the depths and distances of drains and ditches, may give fair idea of what they require according to the classification of soils into compact, medium and porous, each of which variety, may be divided into several degrees of porosity and retentiveness.

| CHARACTER OF SOILS. | | | | | DRAINS. | |
|---|---|---|---|---|---|---|
| Not subsoiled. | Depth of Soils. | | Depth of Drains | | Kind of Drains. | Distance apart. |
| POROUS. | ft. | inch. | ft. | inch. | | According to the declivity of land. |
| Light loam, (fresh land.<br>Sandy loam, " " | 1 | 00 | 0 | 10 | Guard-drains. | Wide apart. |
| Light gravelly sand.<br>Coarse gravelly sand. | 0 | 10 | 0 | 12 | Guard-drains. | Wide apart. |
| MEDIUM. | | | | | | |
| Clayey loam. | 0 | 8 | 0 | 12 | Guard-drains. | Not so wide apart. |
| Gravelly loam.<br>Friable loam. | 0 | 10 | 0 | 10 | Guard-drains. | Not so wide apart. |
| | | | | | | Need subsoiling. |
| COMPACT. | | | | | | |
| Tenacious Clay. | 0 | 6 | 1 | 00 | Hill-side ditches. | Close together, |
| Friable Clay. | 0 | 8 | 0 | 12 | " " | " " |
| Soft Free Clay. | 0 | 10 | 1 | 00 | " " | Not so close. |

If the land be subsoiled, the drains must be deepened and made wider apart. The tenacious clays are not very commonly cultivated in the South. They are too wet for cotton.

## SECTION XV.

**Drill Husbandry.** By the Ridge and Furrow system in contra-distinction to the Check and Hill method, is indispensable to the horizontal culture. Ridging and bedding up land is so familiar to every plowman, in the South, little need be said relative to the manner in which it should be done. They are made both by shallow and deep plowing. We prefer shallow plowing and flat beds in new ground, stable or sward land, and in porous, light, sandy and loose gravelly soils. Deep plowing is best in old hard upland clay soils, that need deepening and opening, in bald prairie lands, and in low wet lands, of both kinds.

The height of ridges and lands are dependent upon the kind of culture, the crop grown, and the character of the soil. For potatoes, we desire them high when the plants are set and when the crop is laid by. For corn we prefer them flat in dry uplands, higher in low lands with clean water furrows. For cotton, in fresh land, and porous, alluvial, and light sandy lands, moderately flat beds may answer very well. They are regulated by the width of the beds. In clay lands, the cotton beds should be high and narrow, and the water furrows deep and clean. We prefer not to plant cotton in wet land, but if it be done, high beds, well drained, is the only remedy against the disastrous effects of water.

The ootton beds are made close or wide, according to the productiveness of the land. In rich river bottoms, and black cane brake land, they vary from five to eight feed wide. Thin and medium quality upland, sandy and prairie lands, they vary from three to four feet in width. Some poor lands, they are as near as two and a half fect apart.

We cultivate our land in ridges for corn, cotton, peas and potatoes. They vary in height and distance, according to the quality and dryness of the soil. They are from six to fourteen inches high, and from three to four feet apart, that is from crown to crown.—When desiring to sow small grain on land, in ridges, we sow the grain and plow four or five ridges into a land, and preserve the direction of the rows.

We sometimes sow cotton land in oats and rye, and throw four turning plow furrows on the grain, and plow out the stalks with a large two horse shovel, thereby making a flat bed, drained by the water furrows, and preserving the width of my beds.

We sometimes sow rye in the fall on cotton land, and run two sweep furrows in each row. In very porous land, if the rye be sown just before cattle are turned in the field, no sweep furrows need be run.

## SECTION XVI.

Advantages of the Ridge and Furrow System—Are, that when the ridges and beds are well put up without too great an inclination, it facilitates drainage by breaking up the crust formed on the surface of land that is sometimes so close and tenacious as to prevent the water from sinking into the subsoil beneath the roots of plants; it exposes a greater surface and depth of land to the action of the sun and air; it enables land to be cultivated that cannot be cultivated on the hill and check method, or any other method; it renders land drier and less subject to the destructive effects of wet seasons; it makes land easier to work at all times with less injury to the crops; the plowing of spring and summer are less hazardous and laborious; the tillage of spring and summer is more certain and effectual; the crops have a nice mellow bed of loose, dry and warm earth to grow and expand in above the cold and wet subsoil; in fact, an artificial climate is produced, which improves the health and hastens the growth of young and tender plants that demand such especial care during spring; and, finally, it prevents land from washing away, and is the basis and support of the Horizontal Culture.

## SECTION XVII.

The Check and Hill Method. This method answers a good purpose on very loose, porous, and level pine lands, for potatoes and ground peas, cultivated mostly with the hoe. It is objectionable to the horizontal culture, because it upsets and breaks up the horizontal rows, and turns the water loose on the land, and destroys the effect desired by the horizontal system.

## SECTION XVIII.

Plowing straight rows by Stakes. This method has been pursued by farmers for ages, and is the favorite plan with the majority of them at this time.

The great ambition of the plowman who lays off the rows, is to make them perfectly straight, regardless of hill or valley, across the field from fence to fence. Nothing but a ditch stops him.

It is astonishing to see the accuracy with which it can be done by a few stakes set in a line with each other. Of course the rows make beautiful drains to dry the hills and cover up and drown the valleys with sand and water. The hill tops and sides are in a few years cut into gullies, and the soil precipitated into the valleys to empoverish them with sand and clay.

This is truly the wash-a-way, land-killing method, and should be abandoned by every farmer and planter who cultivates hilly lands. Level plains of sandy land can be plowed in this manner very well, without doing much injury to the soil, particularly, if the rows are changed and crossed every year or two. We adopt straight rows whenever we can run them on a level.

## SECTION XIX.

Horizontaling by the Eye. Instead of running the rows up and down hill in straight lines, this method directs them around the hills, and diagonally across them, with a considerable fall to them.

If they are directed diagonally across the hills and desired to be straight, they are laid off by stakes. If intended to circle the hill, the horizontaler walks around the way he desires the rows to run, and the plowman follows him and lays off a guide-row. The rows are then laid off by the guide-rows.—This is guess work, and very inaccurate.—We have seen a very intelligent planter, who was familiar with the horizontal culture, circle a basin badly gullied on horseback, followed by two plowmen, one laying off after the other. The basin was surrounded by a guard-drain, that kept the water from the adjoining land out of, and conducted it off out of the field. The plowmen and the horizontaler were below this drain. As they passed over the gullies, it was "gee Ben, haw Dick, haw Ben, gee Dick," sometimes in rapid succession, and was very amusing. We called this work a horizontal farce.

The rows were laid off like the track of a snake in the sand, and had they not been protected by the guard-drain, they would have been cut into many troublesome gullies and galls.

[The conclusion of this admirable Essay, will appear in our June No.]

*For the North Carolina Planter.*

## Clearing up New Ground.

A little experience in clearing up new ground, has led the undersigned to the following conclusions, which he recommends to the careful consideration of all persons about to engage in that business:

In the first place, there is scarcely anything connected with it worthy of more serious attention than the manner of cutting down the trees.—It certainly is not quite so easy to cut a tree down even with the earth's surface, or a very little above it, as it is to cut it about two feet above, the ordinary height at which stumps are suffered to stand. And yet, on fair trial, it will be found to require but very little more time or labor; in fact, nothing of either, worthy of being compared with the manifest disadvantages of leaving the stumps upon the ground, to render its appearance unsightly, obstruct the succeeding cultivation, occupy a large portion of the surface, break plows, harrows, cultivators, and gearing*: wear out the brute force employed, break down the strength, consume the time and exhaust the patience and temper of the laborer.—A little more bending of the back, and a few more strokes of the axe, and your tree is down and out of the way forever; whereas, if cut in the usual mode, a part of it, in the shape of an ugly stump, remains a constant eye-sore and annoyance for ten, fifteen, or twenty years; perhaps even ten added to that; especially if cut at the usual time of the year, which I now proceed to show is on all grounds of reason and common sense the wrong one.

The late fall, the winter, or the early spring is the time commonly selected for this purpose; and the reason assigned is that other work being at those parts of the year less pressing, this can be attended to with more convenience. But, observe, we are not here speaking of the whole work of clearing up new ground, but only of that part of it which consists in felling the trees. Chop your fallen tree up—roll your logs—pile and burn your brush—clean off and plow at whatever time you can, or please to do so; but if you are a man who studies the economy of labor, and the advantages of taking time by the forelock, by all means cut down your trees during the month of August, or if that be inconvenient, be sure and attend to it from the middle of July to the middle of September; and for the following reasons:

In the first place you will thus have secured, to the convenience and comfort of yourself and family, an abundant supply of the very best kind of winter fuel—light, dry, easy to haul, and handle.

In the second place, when cut down at this season of the year, the stump of a tree does not require half the time to rot out; and if cut very low, as above recommended, it does not require one third, if even one fourth of it. For some reason or other, probably because the sap is then fully up, the tree is well known to decay much faster when cut at this season; and if cut very low, the stump will naturally take on a hollow crown, which retaining rain will cause it to be constantly moist and decompose with great rapidity.

---

* The writer of this saw the traces of the same mule broken no less than three times last season, in the course of twenty-five minutes, by the swingletree catching against tall stumps.

A third advantage of this plan is, that all sprouting, except from the few Sour-woods and Persimmons present, *and even they will scarcely with stand this exterminating process*, is utterly and forever at an end. The roots of every other species of tree cut down, or sapling grubbed up, will die dead in a few weeks, leaving nothing which the plow will not easily eradicate and subdue.

A fourth advantage of this course is, that the labor of rolling and burning the large logs will be greatly diminished. This is certainly a fact, and a most important one. The logs having become dry are scarcely half the weight; they are therefore managed with much less expense of time and labor, and burn off with twice the facility.

In the fifth place, any one, who adopts this course, will be suprised to observe the comparative lightness and friableness of the soil. Compared with that of lands cleared in the winter or spring, it is like a bed of ashes. And then again, on inserting his plows he will be equally pleased in observing the ease with which they are drawn. No tough roots are there to obstruct their progress. Those roots are dead—rotten—and easily give way to the force of a single mule or horse.—There is little jerking or straining of the poor animal, no chucking of the plowman under the chin by the upward tilting of the plow handles; no breaking of back-bands and traces; consequently less amount to pay to the tanner and blacksmith.

A sixth reason. It is almost an axiom among those who plant new lands in corn, that a first crop is never more than a half crop. It may therefore, with good reason, be considered as a sixth advantage of this plan, that the first year's produce will be greatly increased by it. The soil being more light and friable, the plow does its work much more thoroughly, and the roots of plants, in consequence, find free range. Besides, the process of decay is more advanced, and it is on decayed vegetable matter that all plants feed.[†] In fact all manures, with a very few exceptions, are traceable to this source—*they are decomposed vegetable matter*, and it is mainly by accelerating this decomposition that some of our most efficient mineral fertilizers, lime for instance, becomes so valuable an addition to the soil.

---

[†] On taking up some Asparrgus roots a few days since, with a view to forming a new and permanent bed, my attention was arrested by two cases which seem to illustrate the fact very clearly, that plants begin to feed upon other vegetable matter before decomposition has much advanced. One was where a root had penetrated and passed at nearly right angles the centre of a small oak branch; the other, where a root had entered one end of a similar piece of wood about three inches long, and having traversed the centre of the entire length, had passed out at the other end and thence gone on in search of other sustenance. The Asparagus roots had in both cases attained at least one third the diameter of the wood perforated, and yet in neither case was the wood broken or burst, but appeared to have been so far absorbed by the plants, without having had any mechanical force exerted upon them. What Messrs. Editors, is the lesson, which such facts read to those who contend that corn cobs are fit only for the road side or fireplace, because they take so long to decay; and that oak, and other kinds of forest leaves are valueless for the same reason? When will men learn to listen to the teachings of Nature on matters of all others the most concerning to us mortals here below, except those which affect our future life.

More might be added, but enough. I give the main reasons only, which the experience of every one who tries this plan will be found to justify.

If it be objected, as probably it will, that this course must be attended by a great sacrifice of rail timber, because rails cut at the time named so soon decay and become worthless; we admit it freely; but this is a small matter, compared with the manifest advantages, and is moreover easily set aside. To obviate it, cut rail timber at the proper season, on some other part of your land; or if it be so scarce with you as to make scoring an object, then reserve in your clearing such trees as are fit for rails, till the right season for cutting them comes around. They will be but few and if cut low, though the roots of these will be longer rotting out than those of the other trees, the inconvenience will scarcely be felt, as there will at least be no stumps left to annoy you.

Let it be remembered, we speak here only of the time and manner of felling the trees. Work off other parts of the clearing process as you please, but cut your trees by all means as near the surface as possible, and during the month of August, at all events from the 15th of July to the 15th of September. Depend upon it that is the most effectual season for killing out timber of any kind, and on observing these rules, you will find real economy of time and labor.

T. S. W. MOTT.

Silverdale, N. C., March, 1858.

◆

WHAT an unfailing barrier against vice, immorality and bad habits are those tastes which lead us to embellish HOME.

*For the N. C. Planter.*

WAKE, N. C. 29th March, 1858.

EDS. N. C. PLANTER: I was much gratified at seeing in your February number, (which I did not receive until last Saturday, having recently subscribed for it,) a communication from my esteemed friend Ben. Bailey, soliciting contributions to the Planter on the soils best adapted to the culture of tobacco, its management, &c., &c. Since he and his father-in-law are both personally known by the writer of this to be among the most successful tobacco and pork raisers of this State or Virginia, the latter being the former residence of one of them, allow me to ask them to give us through the medium of the N. C. Planter, the benefit of their united experience, in a series of articles on the subject mentioned, and especially how low ground tobacco may be made desirable to the manufacturer, as many have supposed it could not be done.

A PLANTER OF WAKE.

[We hope the appeal above made will be responded to, and that we shall have the pleasure of commencing the series of articles, asked for, in our May number. All should contribute of their fund of information, for the advantage of one another, and thus each will be mutually benefitted.—

EDS. PLANTER.

◆

THE rich odors, so grateful to the senses which float in our atmosphere, are tiny, atoms, escaping from the downy petals of the rose or lily, which blossom at our feet. Meet emblems are those odors—floating round us all unseen—of the influence of fitly spoken words.

The field of research for the farmer has no bounary.

# EDITORIAL.

RALEIGH, MAY, 1858.

## Our Cover.

The "DESIGN," on our Cover, will strike many readers as a familiar scene. It represents the State Agricultural Fair Grounds, and in the distance the Capitol of the State. It was taken when a Fair was being held, and is a faithful picture. It is a most appropriate Frontispiece for our Agricultural Periodical.

The addition of a Cover to the "PLANTER" gotten up in the neat style which it presents, involves considerable additional expense, for which we expect to be amply remunerated. North Carolina has now as attractive an Agricultural Periodical as any State, and its matter better adapted to the instruction of Planters in the section for which it is printed, than any other. If it is suffered to languish and die for want of support, it will be a lasting shame to the State. Shall we not have two thousand subscribers by the first of July? We surely will, if those whose interest it is to sustain such a work, will but make a small effort in its behalf.

☞ We send some copies of this No. of the Planter to persons who have not yet subscribed for the work—hoping they will be induced to send on their dollar, and also get their neighbors to do likewise. The Publisher has gone to considerable expense to furnish a neat, first-class North Carolina Agricultural work, and confidently expects a generous, liberal support. He earnestly appeals to all who feel an interest in the development of the resources of our good old State, to give their aid in extending the circulation of the North Corolina Planter. All who may order it, will please state whether they have received the May Number. All the back numbers can be supplied.

## "Goldfinder."

It will be seen by an advertisement in this number of the Planter, that this superior Stallion, of the pure Black Hawk Stock, has been purchased by a public-spirited citizenof Edgecombe, and will stand, at Rocky Mount, in Edgecombe county.

In previous numbers of the Planter, we have spoken of this Horse. It is unnecessary, therefore, that we shouldsay more now, than that we entirely re-endorse the high encomiums bestowed upon him. But we cannot refrain from congratulating the people of North Carolina, upon the opportunity here afforded of securing this noble breed of Horses; and of expressing the hope that all in reach of "Goldfinder" will avail themselves of his services.

## Chinese Sugar Cane.

Don't forget to plant a patch early in this month, if you have not already planted.—Give the stranger a fair trial, but don't let it run you wild upon the prospect of an abundance of cheap "sweet'nin'." Remember you must still raise corn or you will be tormented with starving hogs squealing their death chorus at your heels. It can never supply the place of corn, and we are not quite sure yet that somebody won't get deceived. Somehow we can't help spelling the words MORUS MULTICAULUS over and over, whenever we hear of any great wonders like the Sorgho and Imphee. It is well enough to give the subject a fair trial, however, but it should not encroach too much upon the other crops. We have considerable faith in it as a forage crop, and think farmers would do well to plant a patch for this purpose. In view of this, it should be drilled pretty thick, in order to reduce the size of the stalk and thus bring it more within the power of the cutting machine. —

☞ THE PLANTER, is only $1 a year.—Send on and subscribe.

☞ A considerable portion of this number of the Planter is occupied with Dr. Sorsby's admirable Essay on "Horizontal Plowing and Hill-side Ditching." It is needless for us to call the attention of our readers to it. No Farmer will be so blind to his own interest as to fail to give it the most careful consideration and study. The practice of the valuable information imparted will do more to improve our farms and repay for the investment, than any improvements that could be made in the hill-side cultivation of the State.

In this connection, we subjoin a short but important communication from an intelligent practical Planter in Wake county. Read and learn :

## Hill-Side Plowing.

This is a subject which should attract the attention of our farmers more than it does.—It is applicable to every one ; for there is scarcely a farm in the State but has a hill, small or large, on it. The way hills are cultivated, is ruinous to the land and the farmer ; for they cannot be cultivated many years, before there are innumerable gullies in them ; and then they are said by the owners to be worn out, when in reality, they have never, properly speaking, been cultivated. They have been scratched ove, two or three inches deep, with a tool, or implement misnamed a Plow, but perfectly incompetent to do the work of one. When these hills are planted in corn, the rows are commonly laid off up and down the hill, making it more laborious for horse and man, as no horse can walk up hill and plow ground as it ought to be. The thing is impossible. And yet it is attempted, I regret to say, on nineteen farms out of twenty in the State. The corn rows are the most admirable water drains—taking the water from the top of the hill to where the land is already saturated.

The proper way of cultivating hills is as follows: If there is a ditch running through the low ground at the bottom of the hill, which there should be, and blinded—but if open, commence plowing ten feet from the ditch—throwing the dirt away from it—plowing all around the hill till you have plowed as close to the ditch as you can ; then commence and plow around the hill, throwing it all down hill—of course plowing close to what has already been plowed ; continue plowing round till you finish in the middle of the hill, when the land may be said to be flushed up. If it be planted in corn, commence at the bottom of the hill and lay off the rows around the hill, but not all round, the same as it was plowed. Run the first one round the bottom of the hill, and the next one will be a little shorter, the others will drop back a little, till the short rows on top will work out at the centre of the hill.

Hills cultivated in this way will not wash ; for if the water was to get past one row, it would be retained in the next. If the land is plowed deep, there need be no fear of its producing well. Hills require deeper plowing than level land, as we require them to retain moisture, which they cannot do the way they are usually scratched about 3 inches deep. The first rain that comes washes all the loose earth to the bottom of the hill, and leaves the corn standing on the bare clay, sickly in appearance and diminutive in size. You speak to a farmer about it, and he will tell you it don't pay for the work on it in dry seasons, and in wet seasons his low grounds are inundated. This is all his own fault in cultivating his hills. Never use less than a two-horse plow on a hill. A three or four horse plow is better if you can afford it, and throw it all down hill. In plowing deep we have the following advantages : In dry weather the moisture rises to the surface, in wet the water sinks below the action of the sun, and thereby avoids scalding when the sun shines hot after a heavy rain.

A FARMER.

---

## Convention of Agricultural Editors.

It is proposed in the American Agricuturist, that a meeting of the Agricrltural Editors of the Union, together with other Editors who devote a portion of their journals to agricultural intelligence, be held at some convenient place, during the ensuing summer, for the purpose of discussing some of the more important questions connected with *Soil Culture.*

Such a convention would doubtless result in great mutual advantage to its members. As is remarked—"There is at present a wide diversity of views upon the subject of Chemistry as applied to agriculture ; of the value and mode of applying several of the leading fertilizers before the community ; of the comparative merits of prominent agricultural implements, books, &c. It is believed that these and other topics might well be canvassed by those to whom the community are looking for the most reliable information."

We propose Petersburg, Va., as the place, and the 15th of June as the time for holding said convention.

### New Dress.

We know that *show*—neatness of dress and appearance, in these days of public spirit—have much to do with the success of any experiment, especially in the way of a publication. Of this we have been constantly reminded by our subscribers, concerning the appearance of the North Carolina Planter.—A large number insist that it must have a neat cover, in order to compete, in respectability of appearance, with its cotemporaries in the great field of agricultural literature.—To these, our reply has been—"Our number of subscribers will not justify us in the additional expense." Still they insist that such an improvement will be appreciated and sustained by the Planters.

Determined, therefore, to leave the Farmers of North Carolina, and the Soutuern States generally, no excuse for failing to patronize generously and liberally our North Carolina Planter, we have determined to put them to the test. ☞We therefore issue this our May number on superior paper, with a handsome Cover; and being *filled* with original matter of the highest order, we expect to command the support and co-operation of every one interested in having an Agricultural journal in our good old State.

Our present list of subscribers is not sufficient to pay the expense of publishing the North Carolina Planter. The announcement of this fact will, we trust, be sufficient to induce all of its friends to go to work to increase its circulation. Every one of our subscribers can obtain ten more, with but little effort. Is it asking too much at their hands to request them to do so? Such an addition would place the permanency of the publication beyond doubt.

We are determined to make an honest effort to give the Farming community a handsome and valuable organ, at the cheapest rates. If they will sustain us, improvements will constantly be made in the work: but if they will not, the fault of its failure shall be upon their own heads—for we are determined it shall *merit* their support, whether they give it or not.

### Lime as Manure.

One of the Editors of the N. C. Planter, who is a thorough practical and scientific Farmer, says:

Lime is undoubtedly the best and most lasting manure that can be applied on the clay lands of our State. We have abundance of lime-stone, and nature has been more bountiful to us than to most other States; yet we have not taken advantage of her precious gifts; we prefer to buy lime from the north, at two dollars per barrel, when we can make a good lime and supply ourselves at fifteen cents per bushel, which would be about thirty five cents per barrel. At Goldsboro' there is plenty of lime-stone, and at Beaufort we have material for making lime; and yet we prefer to purchase at the north at a most extravagant price! Lime can be made cheaper here than at the North.

Agriculture demands that some energetic man should start a lime kiln. To him who does this and keeps a good supply at a moderate price, a fortune is sure: And not only this, but the thanks of the Agriculturists of the State will be his, as the greatest benefactor the farmer has ever had. There is no need of clearing more land; it will be cheaper to use lime to enrich the lands already open, and they are much more easy of cultivation. Will not some man of capital step forward and help the farming interest of the State, by making lime and selling it by the ton, or otherwise? Will not the Agricultural Society assist in furnishing the farmers of North Carolina with this great fertilizer? Give us plenty of lime on cheap terms, and we can produce as good crops as any State in the Union.

## Sampson County Fair.

We are indebted to our friend Wm. A. Faison Esq., for a copy of the list of Premiums to be awarded at the Sampson County Agricultural Fair for 1858. Were it not that so much of this number of our journal is occupied with the valuable Essay on Hillside Cultivation, we should publish the list entire. As it is, however, we have to content ourselves with the annexed summary.

The Sampson County Agricultural Society is one of the most prosperous and public-spirited Associations of the kind in the State; and the handsome Premiums offered this time, demonstrates that it will not be behind any of its cotemporaries this year, in offering inducements to develop the industrial resources and advancements of that section of North Carolina.

We acknowledge our indebtedness to Mr. Faison for a number of subscribers, with the promise of more yet. We hope all the friends of Agriculture will remember us in the same way.

The following is a summary of the Premiums offered by the Sampson Agricultural Society, for the Fair of 1858.

*Field Crops*—$20 for the largest crop of Cotton produced on 5 acres of upland, not less than 1800 pounds per acre. Also, $20 for the largest crop of cotton produced on 5 acres of lowland, not less than 2,000 pounds per acre. Also, $20 for the largest crop of corn produced on 5 acres of upland, not less than 50 bushels per acre. Also, $20 for the largest crop of corn produced on on 5 acres of low land, not less than 75 bushels per acre. Also, $20 for the largest crop of wheat raised upon 5 acres, not less than 25 bushels per acre. And Premiums of $5 and $3 for the largest crops produced on single acre, of corn, wheat, native grass, rice, oats, rye, sweet potatoes, irish potatoes, turnips, field peas, &c.

*Sample Crops, N. C.*—$1 each for best varieties of corn for bread, corn for stock, wheat, sweet potatoes, field peas, upland cotton, rice, oats, rye, sweet potatoes, grass seed adapted to that region of country for hay. 25 cents for best single specimens of potatoes, turnips, pumpkins, cabbage, beet, colewort, corn and cotton stalk.

*Cattle, N. C. Devons.*—$5 for the best bull from 3 to 8 years old; and $5 for the best cow do. do. $2 each for the best cow and bull calf, heifer, &c. 5 for best yoke of working oxen under 8 years old. 5 and $2 for best fat cattle. 5 and $3 for best milch cows.

*Horses, N. C.*—$10 each for best stallion and best mare over 4 years old. 5 and $2 for best horse colts and fillies. 5 each for best pair of matched horses raised in N. C.; fastest trotting horse and fastest pacing horse. $2 each for best saddle and best heavy draught horse. 3 each for best Jack and Jennet. 5 for best pair mules, and 3 for best single mule.

*Sheep.*—$2 best buck, ewe and lamb.—Also for the best pair of fat sheep, not less than 5. $1 for best sample of wool not less than two fleeces

*Household Department.*—$1 each for best lard, soap, bread, cake, dried fruits, (each,) preserves, chinese sugar syrup, &c.; $2 for the best half barrel of Sampson county made flour.

*Domestic Manufactures.*—$1 each for best wool blanket, cotton blanket, negro cloth, carpetting, hearthrug, coverlet, socks, janes, sheeting, flannel. diaper, stockings, sewing thread, &c.

*N. C. Manufactures.*—$2 each for best Osnaburgs, Sheeting, and Shirting. $1 each for best cotton, shuck moss and hair matrass; best peice cotton yarn, all Nos.; and also for the best piece carpeting, 10 yards or more.

*Swine—large breed.*—$3 for the best boar over 1 year old; and 3 for best breeding sow with not less than 6 pigs. 2 for best breeding sow over one year old, and 2 for best lot of pigs not less than 6 under 10 months old. *Small breed*—same premiums as above.—*Native hogs*, also similar premiums, with the addition of $5 for best lot of pork hogs not less thon 5.

*Poultry.*—$1 each for the best hen and rooster of each variety of chickens, geese, ducks, turkeys, peafowls, and $5 for largest and best assortment of poultry.

*Pork and Bacon.*—$2 each for best hams, sides and shoulders, one and two years old.

*Dairy, Sampson co.*—$1 each for best butter and cheese.

*Fruits, N. C.*—$1 for best and largest variety of table apples, not less than 1 peck, and at least 12 kinds. Do. of Pears. For best lot of peaches, grapes, best specimen N. C wine, with written directions as to how made.—

Best collection of apple, peach and pear trees $1 each. $5 for greatest variety of fruit trees and vines, not less than 50 kinds of fruit, with written lists of the kinds, and designating their time of ripening, growing in Sampson county.

*Horticulture.*—$2 for best and greatest variety of garden vegetables. $1 for the best and largest variety of garden seed, of not less than 20 approved varieties.

*Mechanical Premiums.*—$5 for the best road wagon ; 3 for best two horse wagon ; 2 each for the best wrought iron one-horse mouldboard plow ; for the best do. two horse do ; best subsoil plow; best thresher, best fan ; best corn and cob crusher ; (N. C. ) $1 each best cotton scraper plow ; best sweep, tooth harrow, one horse dump cart, ox cart, ox yoke and bows, farm gate and hinges, plow gear for plantation use, straw cutter, corn sheller, grain cradle, seed planter, manure fork, and best set turpentine tools.—$3 for best portable work bench, with full set plantation tools in a chest attached to bench. 3 for best three specimens of printing by one individual in N. C. $2 for best stocked plow offered by a slave; and 2 for largest and best collection of farming and mechanics tools.

*Manufactures in wood, iron, &c.*—$5 best family close carriage. $3 each best buggy ; best and largest collection leather N. C. tanned. $2 each scretary and book case, Southern wood ; best carriage harness, buggy do. ; saddle and bridle ; best suit of clothes made in N. C. of N. C. goods ; best suit of homespun made in Sampson. $1 each for the following ; best screw plate ; best rope twisting machine ; bedstead, set common chairs ; invalid chair ; dining table, tin or wire sofa ; and a variety of other things embracing every branch of industry.

Besides the above, premiums of $1 and $2 are offered for best broidered and worsted work ; best oil Paintings of N. C. execution—historical, of the animal tribe, landscape, fruit and fancy ; also, best collection of water colors.

☞ A silver cup worth $10 is to be awarded for the best equestrian performance by a lady ; and for the second best equestrian performance by a lady, a gold pen and pencil worth $5.

A premium of $25 is to be awarded to the best cultivated Farm of not less than $50 acres. And a premium of $5 for the best young orchard of not less than 300 fruit trees of the best varieties.

Premiums are also offered for experiments and essays on the following subjects: 1st. Effects in profit or loss of the usual mode saving Corn Fodder, by stripping the green blades and cutting off the tops. 2d. Cost and effect of subsoil Plowing, under different circumstances of soil and subsoil. 3d. Action or non-action of Lime as a manure. 4th. Cost and effects of Bone Dust or Phosphate of Lime as manure. 5th. Best series of comparative Experiments in the cultivation of Corn.

Those desiring circulars in full of the Premiums, can be supplied, by addressing E. L. Perkins,Secretary, Clinton, Sampson County, N. C.

## Blooded Cattle.

The following response to our interrogatory on this subject, is given by a gentleman of much experience who resides in Robeson county :

Clay Valley, N. C. April 12, 1858.

Messrs. Editors : In answer to the inquiry in the last number of the North Carolina Planter, "Why it is that fine cattle are so apt to die when brought to this State ?" I can say, that from 30 years observation, I have learned the following facts, viz : Cattle removed from good pasturage to inferior, in any direction, will not do well. They may be removed from South to North, and either East or West, without any risk, provided the pasturage or range to which they are taken is as good or better than that from which they have been removed. But from North to South they cannot be taken under any circumstances, without great risk. *Why* it is, I know not ; but I believe that nine-tenths of all full grown, fine-blooded cattle that are carried 200 miles South, will die the first spring and summer, treat them as you will. Young cattle, say one, two or three years old, may be saved by proper treatment; that is, keep them well sheltered from the rain, and sun in the heat of day, in clean well ventilated sheds. Let them have plenty of cool well, or spring water. They should have rye or good grass lots to run on, morning and evening, in good weather. Feed them plenty of hay, oats and fodder ; all kinds of vegetables from the garden that they will eat, and slops from the kitchen with a little rye or corn meal mixed in. They should be regularly curried and rubbed every day.—As soon as they are discovered to be unwell, pour cold water freely over the head and along the back, three or four times a day, until they are well. After the first year, there is not much danger, but they will not be fully acclimated under two years; and during that time they should not be permitted to run in the woods with the native stock. It is scarcely necessary to say, that the best time to take cattle South, is in October and November.

Yours truly. R.

---

CLAY VALLEY, N. C. April 12, 1858.

MESSRS. EDITORS: Will you, or some of your subscribers, inform us what grasses will grow best on the pine lands of Robeson and adjoining counties? we have none but crabgrass, and that we treat as an enemy, destroying all we can of it. We are in much need of grass, for hay and pasture, and if we cannot get information, we must experiment until we learn which will do best.

Robeson county is perhaps capable of being made equal to any county in the State, in agricultural production, and yet we are lamentably behind in many respects.

The North Carolina Planter is calculated to do us great good, and every farmer in the county should take it.

Yours truly, R.

[We would suggest to our correspondent that he begin his experiments with the "Hungarian Grass," which has been tried with the finest results in Georgia and Alabama. It is said to grow well in any land that will produce Indian Corn; bears a heavy rich seed, 25 or 30 bushels to the acre, and produces a hay that horses and cattle prefer to any other grass, or even oats. It should be planted about late corn planting time, and can be harvested after all other crops are in. One bushel of seed sows three acres.—It makes a good crop to cut in six weeks; or or it may stand six months and get quite ripe, without injury. It is a hardy grass, and when cut down take a vast amount of wet weather without injury. So say those who have tried the Hungarian Grass, and many express the opinion that it is one of the greatest discoveries of the age in agricultural importance. It is being extensively tested in Virginia and Tennessee this year, and we hope it will have a fair trial in North Carolina—and we know of no place better than the home of our friend—Robeson county. We see it offered for sale by Rutherford and Doyle, Nashville, Tenn. We know of none for sale in our State, but hope some of our seedsmen will introduce it, so that it may be tried whether it belong to the genus of the "Rescue Grass" humbug.

But we know that the Bermuda, the Crab or Crowsfoot or Guinea grasses, and the Herds grass, are reliable for summer grazing and mowing and make permanent pastures on common land; and oats, millet, barley and rye for winter and spring grazing. And what is more, if a proportionate amount of labor is added to their cultivation, the land sown in grass will pay better than the same quantity planted in corn, cotton, or any thing else.

Will not some of our subscribers take up this interesting subject, that our native grasses may be examined, and those that are valuable for hay and pasturage, made known to our Planters.—EDS. N. C. PLANTER.]

## Preparing Cotton Seed for Planting.

The following Communication is from one of the largest and most successful Planters in Wake county. We shall be pleased to hear from him often:

EDITORS N. C. PLANTER: As the time for preparing our soil for the reception of seed, this Spring, has been so short, and many Farmers cannot prepare their cotton land in time for early planting, permit me, through your valuable paper, to give my plan of preparing the seed before planting:—In the first place wet the seed thoroughly in ashes—make them quite wet—bulk them until they begin to feel warm, then shovel them up well, so as to have the seed that were on the outside of the pile turned in; then wet them again and spread them about 10 or 12 inches thick, stirring them two or three times a day and pouring on water so as to keep them quite wet, and in one day and night they will be sprouted. If the sprouts are 1½ or 2 inches long, it makes no difference—they will come up even if the land is dry. I have been preparing my land in this way for years, with good success. I have planted cotton one evening and seen it coming up the next, in favorable weather. The seed should be kept well stirred so they may all sprout as near alike as possible, or those seed that are best sprouted will be up first.

There is an advantage to be gained by sprouting seed, besides getting an early stand, viz: the cotton comes up before the grass, and gives the planter an opportunity of working his cotton before it gets grassy.

I will also speak of a wrought plow hoe, for cultivating cotton or corn, that has not been excelled by any implement I have seen. It is much used in my neighborhood. The hoe is made with a bar and colter, as the old jack and daggan hoe, with a ring running up the colter 1½ inches, and at the right hand end of the wing it rises higher than the other part of the wing—about 2 inches higher and from 2¼ to 4 inches wide. I have them of different sizes to suit the size of the cotton. Those for corn are larger. With this implement I have made the crop with eight furrows to the row and one sweep furrow, plowing the cotton five times—making in all nine furrows to the row.

N. PRICE.

## Correspondence of the North Carolina Planter.

HALIFAX COUNTY, April, 1858.

MESSRS. EDITORS: Feeling deeply interested in the entire success of the North Carolina Planter, as an Agricutural Journal, and believing that a well regulated course of correspondence, from the Farmers of the State, who are endeavoring to improve their farms and at the same time obtain heavy products, giving the result of experiments, &c., will contribute greatly to the interest and profit of its readers, allow me to unite with you in urging upon each and every Planter to contribute to its columns.

I believe it is to the interest of every farmer, first to become a subscriber to the Planter, and then report, through its columns, the result of every experiment, in any branch of Agriculture, whether it succeed well or not. The Planter is yet in its infancy, and while I am very much pleased with it and look anxiously for its monthly visits, yet I can but think that the above proposition, generally aceeded to, would add very much to its real worth, would enable the editors to make it still more a source of profit to each and every one of its readers, and that ere long, the North Carolina Planter would become one of the first Agricultural journals in the land. "So mote it be."

Messrs. Editors, I am a North Carolinian by birth, my interest is here, and I feel deeply interested in all her enterprizes; and do sincerely hope that the Planter may be liberally supported by her farmers. To this end I shall take the liberty to solicit subscribers.*

Yours very respectfully,
EDW'D. A. THORNE.

## The Pettis County, Mo., Premium Crops of Corn.

MESSRS. EDITORS: I saw in the March No. of the N. C. Planter, an article relative to the above subject. As some farmers doubted the correctness of the figures, (241;—185½, and 135,) I addressed a letter of inquiry to the Secretary of said Society, (Mr. J. F. Philips, Georgetown, Mo.,) and received the following reply:

He says the Report of Mr. Jones, to the Washington Union is correct; "the said quantities having been gathered, measured, and certified to by good impartial citizens, appointed, and sworn for that purpose. This production is the peculiar offspring of our prolific soil; and *owes its yield more* to the *virtue of* the *soil than* to *good husbandry.*

"No doubt but the crops reported had parallels in many parts of the country, had the humble tenants but entered the list for the prize. The kind of corn planted was white gourd seed. The number of acres planted were about forty by each competitor.

"There was no extra preparation of the ground: no manure was used. (Our soil needs no such stimulants.) It was all lime stone soil. The land was rather new, having been in cultivation from two to three and four years.

"Mr. Scott's ground was broken up in the Fall with two yoke of oxen. Priest's was also broken up in the Fall. Gentry's was broken up in the Spring, with common two horse plows.

"The land was laid off one way, and the seed drilled in rows three feet apart, about the 1st of May. The corn was planted by dropping the seed in the hills one foot apart, and covered with hoes.

"After the corn came up, it was harrowed, plowed twice and hoed twice, and gathered about the 1st of November."

Thus we perceive the secret of the wonderful yield, is rich virgin lime-land, thoroughly prepared and well cultivated, in a suitable climate.

N. T. SORSBY.

Falkland, Ala., April, 1858.

---

*Mr. T. has since sent us a club of subscribers. Go and do likewise.—EDS.

☞ We call the attention of all interested, to the following notice, on a matter of importance to all interested in our State Agricultural Society.

## Life Membership.

Messrs Editors: It will be remembered that our State Society has established a system of Life Membership, and fixed the price at Twenty Dollars, the object being to procure a large number of them and to form from the proceeds a permanent fund for the benefit of the Society. This fund is to be kept untouched, only the Interest being available. The whole number of life memberships now on the books is only 22, making $440: an amount much too small to produce any result of importance.

I desire through you, Messrs. Editors, to call the attention of our fellow members to this matter. It certainly merits their consideration in the highest degree. The amount is moderate; the end high and noble, the result surely attainable. Who then will come to our help? should I not rather say who will stand back, when the call is made on him?

The question of a permanent fund was fully argued at our last meeting, and a number of public spirited individuals, particularly from the noble old State of Edgecombe, pledged themselves to the aid of the society. However acceptable these free will offerings, from patriotic hearts, may be, they will always be uncertain in amount, must fluctuate from year to year and are liable, at any time, to be finally extinguished, by the death of the contributors. The aid of the State is likewise precarious, and then, as was urged before the meeting, the best way to induce the Legislature to help us, is to go bravely to work and help ourselves. It is earnestly to be hoped, therefore, that during the next meeting, the list of life members will be largely augmented. Brother Farmers, we can do it; *and we must!*

The Diplomas are executed in the highest style of the printing art, beautifully illuminated, in colors, by Mr. W. D. Cooke, of this city. They are now ready for distribution; only twenty dollars apeice; who bids?

We learn that the Diplomas already paid for are in the hands of the Secretary, signed and sealed. Any member wishing it can have his diploma forwarded by mail or delivered, as he may direct, on his addressing the Secretary, at Raleigh.

Raleigh, N. C. April, 1858.

☞ E. A. Thorne, Esq., of Halifax county, sends a $10 bill, and says—"As a proof of the interest I feel in the N. C. Planter, I herein send you ten dollars for ten subscribers; hoping that each of your subscribers may go and do likewise." Thanks, kind sir: and most heartily do we re-iterate your "hope." Such a lift from all our present subscribers would place the existence of the Planter beyond doubt. Will not all "go and do likewise?"

* * *

Tawboro' N. C. April 7, 1858

Messrs. Editors: In the March No. of the N. C. Planter, I see that your Halifax correspondent gives a statement of the use of shorts as a fertilizer. He considers it a discovery entirely new, and supposes that if the use of shorts in the corn hill be equal to Guano, it will prove of inestimable value to the farming interests of N. C.

Permit me to state, that a few years ago I saw a lot of corn in Beaufort County, which was very superior.—I learned from the gentleman to whom it belonged, that upon a portion of it he had used Guano in the hill; on the remainder he had used wheat bran.—Both were applied in the hill at the time the corn was planted. Both portions of the lot were cultivated alike. That to which the wheat bran was applied, was larger and of better color, while growing, than that which received the Guano, and I afterwards learned that the yeild was decidedly greater. If you think it of any use, you are at liberty to give this statement a place in the Planter.

I am not prepared to state accurately the quantity of Guano, or of wheat bran used per acre, but can obtain that information if desired.* I know the impression on my mind was, that the usual quantity of guano was used, while that of bran was moderate.

But will your Halifax correspondent inform us where farmers are to obtain shorts, or wheat bran, sufficient to be used as fertilizers? Will he also inform us what will be the comparative cost in the use of either, and that of Guano? Information on these points may be of interest to farmers who do not reside in wheat growing portions of the State.

Respectfully,
WM. CLOSS.

*We should be pleased if our friend C. would get the full particulars in this case. And we hope our Halifax correspondent will respond to his interrogatories as to where the shorts or wheat bran is to be purchased, &c.

EDS. PLANTER.

---

We commend the following article, by a Beaufort County Farmer, to our readers:

*From the Dispatch.*

## Raising Hogs.

MR. GRANGER:—I notice in a late number of your paper the remarks of your correspondent, "A Farmer," upon the subject of pork raising. He inquires "why is it that in a county with rich swamps, abounding in forests, with streams of water, &c., we see so few hogs?" This subject is of the highest importance to our people, and I will endeavor to answer, in part, the interrogatory of your correspondent, and add such suggestions as I think appropriate to the occasion. That there is a general scarcity of hogs throughout our country, is a fact which all admit, and which I think can be traced to several causes. First—The general want of attention in feeding at regular times and in proper quantities. Secondly—The want of frequent supplies of small grain as an article of food for breeding sows. Thirdly—The greatly decreased quantity of forest masts, by the destruction of timber. To these causes may be added the diminished crops of sweet potatoes in consequence of the destruction of seed by the cold, the few past Winters, and moreover many of our farmers having ditched their lands thoroughly, exclude all stock from their fields.

I would suggest that our farmers feed their hogs regularly with sufficient food to keep them in thriving condition; that the breeding sows have frequent supplies of rye, wheat or oats— (black wheat is injurious;) that the chinese sugar cane be used in part as a substitute for the sweet potato; that they put their hogs up to fatten the latter part of August or early in spring, and that the hogs be put up in close pens, filled in with mud or mould to the depth of two feet, with a covering of boards or bushes, to protect them from the heat of the sun.

The chinese sugar cane can be cultivated with half the labor required for the culture of the potato, and is, I believe, a more valuable article of food, as the stalk—of which the hogs are very fond—contains much saccharine matter, while the seeds are rich in mineral elements.

The hogs, if put up early in the season, will become fat through the moderate weather of the fall months, thereby saving much food, which would be required to supply additional animal heat in the cold months of winter. At this season moreover, green food—of which the hogs are very fond—abound in large quantities, and as they require frequent changes of food, the chinese cane, green corn, crab grass, &c., can be given with the best results, and save the necessity of grinding or boiling; for it is a great waste to make a practice of feeding hogs upon dry corn and raw potatoes.

The manure manufactured by this process, will produce a quantity of food equal to that consumed in fattening the hogs, and the farmer will lose nothing but his trouble, which will be amply repaid by the pleasure he will derive from a luxuriant crop at harvest. But I fear, Mr. Editor, I have already trespassed too far upon your columns.—There are other things, connected with this subject, which I wished to say, and you may hear from me again; for when it is recollected that the increase of population of the U. States has within a few years, exceeded the increase of cattle, hogs and sheep by some 30 per cent., it is time that our people should feel a lively interest in the matter.

Beaufort county, 1858. X.

---

☞ We expected to send out a list of the Premiums for our next State Fair with this No. of the Planter; but we had not received the copy when we went to press.

P. S.—The list is just handed in, and will be found in this No. of the Planter.

# HORTICULTURE.

**S. W. WESTBROOK, EDITOR.**

## REMARKS ON ORCHARDING.

CONTINUED FROM THE APRIL NUMBER.

### *Seventh Proposition.*

### FRAMING AND PRUNING.

We have been convinced for a number of years, that heavy Pruning is very injurious to thrifty Orchard trees, at any one time, and much more so in the Spring. But if an Orchard is pruned annually, and the object of the pruning is to produce symmetry and thinning out of limbs that cross each other, then we assume the position that Spring is the proper time to perform the work, if no limb is taken off that is more than three-fourths of an inch in diameter. By pruning annually, a large amount of wood need not be taken away at any one time, and in the early growth of trees they may be trained into any desired form, proving the truth of the old adage:

> " As the twig is bent
> The tree is inclined."

If an Orchard has been neglected for years, and it is actually necessary to cut away large limbs, then the work should be deferred until the close of the growing season, when the trees will not be so liable to be injured by the peeling of the bark or the stagnation of the sap. But if there is any way to avoid pruning out large limbs, it would be better to do so, as there is great danger of decaying the heart wood of the tree by the operation.

Some attention should be paid to the manner of cutting away limbs, as there is a certain point designed by nature where a branch or limb should be cut off, if necessary. At the base of every limb there is a bilge or circular ring of wood, which grows out from the main stem of the tree and circles the limb sometimes as far out as a half inch from the trunk. At that point there is a seam or crease in the bark, indicating the place for amputation. If it is cut off precisely at the place where the ring of circular wood terminates on the limb, the edge of this annular protuberance at once commences to grow over the wound, and before the growing season draws to a close the wound will be entirely healed over. But if the bilge of circular wood should be pared off to the main stem of the tree, the wound is almost incurable and effects as much injury to the tree as the cutting away of a large limb, with the exception that the tree does not suffer so much by the loss sustained by cutting off a small limb as a large one.

In Pruning, the operator should be careful to keep the tree well balanced on every side; and if any preference is given on any side of the tree, it should be on the South-west side; because it is important that all orchard trees should lean in that direction at least one or two degrees, so that the stem of the tree may be partially shaded by the branches from the burning rays of the three o'clock sun.

No large limb should be permitted to grow to any length on the North side of any orchard tree, as all trees not indigenous to our climate, have a tendency to incline their heads to the North pole—a fact which is more fully exemplified in the growth of the heart cherry than any other. Hence the importance of giving the preference of weight to the South-west side of the tree, (if any) to preponderate against the natural tendency of Orchideous trees to the North pole. We think it unnecessary to protract our remarks on this subject, as we expressed our views fully, in reference to low training, and thinning out branches, in the February number, in our chapter on Heading-back or Foreshortning.

### Eighth and last Proposition in our original Programme.

The importance of keeping the rough bark and moss off from the trunk and limbs of orchard trees, and the kind of wash best calculated to keep the trees in a healthful condition and protect them from the scorching rays of the summer's sun:

There is a great difference between forest and fruit-trees, in their mode of propagation habits. The former only needing the uisite soil and situation in the forest-wilds eproduce each indigenous species after kind, without the aid of man. The latter being indigenous to our country origin- , and not invariably suited to our climate, more important that they should be more bly cultivated than native trees. And do not only need careful cultivation, they need many other kinds of labor to lone upon them, to make them productive beautiful. While the great oak may on its rough bark at an early age, and n an almost impenetrable covering, it will do to permit fruit-trees to do so with but exceptions ; because in the apple and r trees, it is very apt to produce canker ut the collar of the tree, which extends he roots, causing premature decay. In r to prevent fruit-trees from taking on r rough bark too early, it is necessary they should have an annual washing with e article that will keep the bark soft and ler. Many articles have been recom- ded ; among the rest, soft soap alone ; ch we regard as very objectionable, if it plied in the spring (which is the proper to apply wash to the trees,) because the color of the soap attracts the heating of the sun, which often scalds the sap, produces a disease known as sun-blight, of the greatest drawbacks to Southern t culture. Before a wash of any kind is ied, all moss and rough bark should be fully rubbed off just after a rain, when n be done with much more ease then than n the rough scales of bark are dry and l. At the same time the soil should be wn away from the collar of the tree, fully sing the latteral roots and suckers, if Rub off the rough and decay'd bark around the collar and roots of the tree ; all insects that may be found ; and if e are any suckers, pare them off smooth- with a pruning knife or thin chisel, with- bruising the roots of the tree. Where any nds are made, either in cutting sprouts therwise, apply hot grafting wax to the wound with a brush, which will heal the wound and prepare the place for the reception of the white-wash.

Now that all pruning for the season is done, the rough bark and moss taken away, the trees are now ready, for the reception of the wash. We recommend a white-wash, made of the following ingredients, which we have tried for twelve years; and we find nothing equal to it :

Put three pounds of tobacco, or twice the amount of stems, into thirty gallons of water, and boil it until the juice is extracted. Then skim out the leaves and add two gallons of soft soap and a half gallon of salt, and while in a boiling condition, stir in quick lime until it assumes the consistency of white-wash. While the lime is being stirred into the boiling compound, there is great danger of the ingredients boiling over ; it would be well therefore, to keep a plenty of cold water near to settle the wash when it is about to waste.

After the lime has been thoroughly incorporated with the other ingredients, and is of the proper-consistency to apply to the trees, dip it out of the pot and put it in a half hogshead or barrel, and when it is cool apply the wash with ordinary white-wash brushes to the limbs and trunks down to the latteral roots of the tree : and be very careful to fill every hole and crevice about the tree, in order to break up all harbors for insects. If one application is not sufficient to cover the bark, give the trees another coat. One application of the wash each spring, is sufficient ; as the prominent object in using the white-wash is to protect the trunks of the trees from sun-blight, which it does most effectually.

## The Curculio.

Watch for the Curculio or plum weevil.—As soon as the young Plums, Nectarines and Apricots are as large as a pea, they commence puncturing the fruit. One single curculio will puncture at least one hundred specimens in one day. The insect is about three-sixteenths of an inch in length, and nearly an eighth of an inch thick, and they are invariably the color of the soil where they are to be found; hence it is impossible to capture one after it falls from the tree. As they are in their habits very much like the opossom, as soon as they are disturbed they become sullen and to all appearance are dead. There has been more discussion about the "grand turk," (so called) than any other individual of his diminutive size and standing in society, not even excepting the Turkish Admiral, now visiting the United States.

The Curculio may be captured very easily, and it is only necessary to spend a minute or two to each tree, during each day, or until they become extinct for the time being.—Some orchardists have used an umbrella for the purpose of capturing them: It is made so that the stem of the tree can be surrounded with the umbrella in an inverted condition. When the umbrella is placed under the tree, the operator gives the tree a sudden jar, by striking the stump of a limb, (which has been sawn off for the purpose,) and every Curculio at once falls from the tree, and the umbrella receives them. We have been observing the many experiments made upon the Curculio for years, and have tried several ourselves, and we find no mode used to destroy them better than the following: We use domestic cloth, such as is used for maing sheets, one and a half yards wide, and tack it on strips of light plank nine feet long, after the following manner: Take three yards of the sheeting and tack the edges of it on two strips of the plank; then take three yards more and tack it on two other strips.—We now have two sections of the Curculio frames, and if they were placed together we would have an area of nine feet square; but we do not wish to do so; they must be so arranged that the frames when connected together can be passed around the tree, and either lay them down or hold them up while the jaring process is going on. In order to connect the two sections together so that tree will be right in the centre, they sho be laid down flat, seven inches apart, parallel with each other; then connect th together nearly half way by tacking a pi of cloth on the two slats that lie seven inc apart; this connects them together: let the frames lie in the same position take another piece of domestic, four feet l and fourteen inches wide, and tack on of the slats at the other end; this last pi of domestic is designed to work like a hi either to be turned over on the edge of other frame when it is placed around the so as to cover the whole area, or to turn b out of the way when the frames are ta away from the tree. When placed un the tree, jar the tree by a sudden tap wit mallet on the stump of a limb left for purpose, and the Curculios will at once on the sheets. Take hold of the ends of slats and remove it from around the tree pass on to the next, and so on until s twenty trees are jarred; then examine sheets closely and kill all that are upon t or empty the contents in a bucket of boi water. Some four or five small boys one grown person, will jar a hundre two trees each morning and evening but little time, while they will save a va ble crop of Fruit. It is not necessary to the tree when the Curculio have been stroyed. Sometimes we do not jar any several days, but we watch the trees dail see if there are any fresh punctures on fruit. When we find small crescent-sh punctures on the fruit again, we comm jarring the trees, and so proceed during growth of the fruit until it is out of dang

* * *

## Pomological Convention.

In relation to a Southern Pomological Horticultural convention, which you su in the last issue of your valuable Agric ral journal, we have no doubt but su convention would tend to concentrate upon these two branches of industry, free intercommunication of the result o erience of each individual from different nts in the Southern States, and that the d effects of such a convention would be ding in its consequences.

t seems to us, that the greatest drawback n the successful practice of these sciences he South is from the following cause: standard works professing to be guided hese subjects, are by Northern authors, though, no doubt, excellent authority ere they were published, nevertheless, at south calculated to mislead; and conse- ntly worse than no books at all to the thern Pomologist.

his fact is owing to the circumstance of ersity of climate. and the utter impossi- ty ever to acclimate many varieties of es, shrubs, and plants, to a climate in ich they are not indigenous. We there- have, for many years, had a fixed belief, ich the observation of each succeeding r serves to strengthen, that before the th ever arrives to that state of perfection ich her destiny has rendered her capable she must have a Horticulture and a Po- logy of her own, separate and distinct n any standard works on these subjects lished at the North.

s far as Pomology is concerned, we know t we speak advisedly in saying this, and believe that our remarks are not without ir true application in relation to Horticul- e.

his question remains to be answered af- natively, and then I feel that these sciences he south, have their bases on a rock.— ere is the individual, possessing both the ntal and pecuniary means, who will un- take the work?

here are, no doubt, many individuals ll qualified to perform this work; amongst om two gentlemen at this time are presen- to our mind, to wit, Col. Gage, (Broom dge,) and W. M. Summer, both of South rolina.

e pledge the assistance of our practical erience to aid in getting up the work.

S. McDOWELL.

ranklin, Macon N. C., April 15th, 1858.

*For the North Carolina Planter.*

## How to have Fruit.

essrs. Editors: I have recently learned m an experienced Orchardist of South rolina, that any fruit tree may be made to om sufficiently late in the season to pre- ve its fruits from the frosts, and conse- ently, present a heavy crop, by the following treatment:—In the middle of winter, when the ground is most severely frozen, place a large pile of wheat straw or oak leaves around the roots, letting it extend some distance in every direction so as to cover the extended roots that approach the surface of the earth. Cover this pile with planks or boards, so that no rain can fall upon the pile. Let this cover remain until all danger from frosts has passed, then remove the cover and the straw, and look for a splendik crop to follow soon.

The *rationale* is simply this; the frozen earth will not thaw till very late in the spring, if the pile remain. And while the earth is frozen the tree cannot bloom. But when all danger is past, you can remove the covering, and the tree will bloom forth speedily. Try it friends.

Burke Co., N. C. R. L. A.

[We have tried the application of leaves to the roots of Fruit Trees, as directed, and know, that it does greatly retard the rising of the sap. The addition of the boards and planks must cause a longer retention of cold to the earth and roots, and therefore still further militates the buds and blossoms on the tree. We believe the theory a good one for the purpose designed;—the only fear being, that in a very late spring the frost so long retained around the roots of the trees may possibly kill them.—Eds. N. C. Planter.

Halifax County, N. C., April, 1858.

Messrs. Editors: I am much pleased with the Planter, and especially so with the Horticultural Department. Your remarks on the cultivation of Fruit Trees, is fully worth the price of subscription, to say nothing of Mr. McDowell's letter in the April No., which to those about planting orchards will be worth hundreds of dollars.

My humble experience is precisely what his has been, in planting trees highly recommended from the North. They have proved nearly worthless here. Nor did I know till recently, that there were in the South Fruits fully as good, and better adapted to our climate. I am, however, now convinced that such is the fact. The great difficulty in propagating Southern varieties of Fruits of merit, has been our want of confidence in our own seedlings, and a disposition to look elsewhere than in our own sunny South, for everything of superior excellence. Now, I for one, believe in North Carolina in every sense of the word; and my confidence has been greatly strengthened by recent personal observation and comparison with the North, the great West, and the South; and while others are welcome to look abroad for wealth and comfort, I am satisfied and determined to pitch my tent on this "camp ground"; not for a few days, but for life; or in other words, I am content to plant trees in North Carolina and enjoy their fruits, or leave them as a monument of my affection to the old North State.

But to return to the subject of seedlings and Fruit: I believe there is on almost every farm a Fruit of merit, but it has no name and is perhaps but little noticed and never propagated; and if by chance it does attract some attention in its neighborhood, while all admire it, no one thinks of bringing it into general notice, by describing its qualities.—On the contrary, there is rather a selfish disposition to confine its reputation to the place of its origin—somewhat on the "dog in the manger" principle. But if we can get up a little more interest in the growth of Southern Fruits, and a little more of that spirit of confidence and State pride that prompted Mr. McDowell in his letter to your journal, we shall in a few years have a succession of Fruits in the South, second to none in the Union.

In the mean time, I beg of you to continue, as you have begun in your April number, to urge all lovers of the science to come to your aid, and let us hear of more Southern seedlings; more suggestions on Culture, Propagation, &c.

I desire to call your attention to one of the grand causes that retards the planting of Fruit Trees in North Carolina, and would do so now, but I fear to tire your patience; and will merely hint that no farmer can feel justified in planting Fruit for profit or comfort, until there is some law to protect him from theft, and give him some reasonable hope that he will be able to gather at least a small portion, and not have it to buy from some slave or free negro who has stolen it, as is the case now.

Yours, **BELLFLOWER.**

* * *

*To the Editors of the N. C. Planter:*

There is, perhaps, no individual in our Southern States who has succeeded in making a good Apple Orchard, but has had some sad and provoking experience in regard to the insidious attacks of that formidable enemy of the Pomologist—the Borer-worm, which makes its attack at the root of the tree, at the surface of the ground, and it first detection is commonly the chips from its perforations strewn upon the ground, and the tree girdled entirely around, and apparently lost beyond hope of recovery.

Such is a brief and true history of our own annoyance, while engaged in making an Apple orchard in Macon Co., N. C., now consisting of 600 trees of the most choice varieties of Winter fruit, nearly all of which are Southern seedlings. This orchard was commenced in the year 1833, and up to 1851 one-fourth of the trees had perished by the ravages of the Borer, and had been re–set with new trees. Since 1851 we have not lost the first tree by the Borer, nor do we ever expect to, while blessed with health to visit our orchard. In the spring of the year above named, having a flourishing young tree—a new seedling, which had received our greatest attention the preceding summer—you may guess at our mortification now, to find it perforated at the root by the detested borer, and girdled entirely around. With the point of our knife we cut away the perforated bark and wood where the worms had gnawed, and thus detected the round holes by which they had bored their way through the solid wood and taken up winter quarters near the centre of the tree, the fall preceding. We felt revengeful, and with a stiff wire charged upon them and punctured them to pieces—that is, some of them. Others had taken a zig-zag course;—these we sealed up with turpentine soap. A gleam of hope now dawned upon our mind, that we could save our tree—the thing, at least, was worth a trial, and we proceeded as follows: After scraping away the earth from the roots down to the runners, with a strong sharp knife we made vertical cuts clean through the bark on straight lines, loosening the bark above as well as belew the girdle; we then had some healthy water sprouts that we cut into sections; these we split and pared to a flattish point at each end, commencing at the pith and letting the knife run out toward the bark; one end of this we forced between the separated bark and the wood in the root part, and below the girdle, then by bending this piece of water-sprout we inserted the other end between the bark and wood, and above the wounded and girdled part; thus forming a duct—a medium of communication for the sap from the root to the body of the tree:—we treated all the sections of cut bark in like manner, having a duct under each, and so passing completely around the tree: we then bound the bark tightly down over the ducts with strong twine, after which we piled the earth around the tree in the form of a potatoe-hill. Now for the result:—That Summer the tree made a vigorous growth, and is now as vigorous growing tree as any in our orchard. The communicating ducts, or water sprouts, have formed themselves into a corrugated shield over the part of the tree which was girdled, and has the appearance of a compact mass of strong nerves.

Since that time we have had many trees girdled by the Borer-worm, not one of which we have lost, nor expect to lose. While we have the greatest contempt for the Borer, it is without a particle of fear; his depredations being in fact, a source of amusement, as it affords an opportunity of showing our skill in Horticultural surgery.

We have studied the history of the Borer. worm from the Ovium up to his winged mother that deposited him, and may, perhaps, in a future number of your paper, give his villainous pedigree; and we intend to do it better than some individual who has attempted it in a late number of the "American Agriculturist."

S. McDOWELL.

Franklin, Macon Co., N. C., April 1858.

[We thank our intelligent and experienced friend for this valuable contribution to our Horticultural Department, and beg a continuation of his favors.—Eds.]

# FOR THE LADIES.

## Floriculture.

### HINTS FOR THE MONTH.

The Flower Garden, should now have an air of neatness about it peculiarly its own. The herbaceous plants, that is those plants which die down to the surface of the ground, and start into growth in the spring, may be neatly tied to stakes, to guard against breakage from rough winds and other accidents. Pinks in bloom may have abundance of water, in dry weather, during the blooming season. Annuals sown early last month, may now be thinned out, where too thick, and transplanted either in bunches of three or four, or single. Coxcombs, balsams, and many other large growing plants, should be planted single and have plenty of room:—Where grass is growing around the dwelling, it should be well rolled once a week, and if luxuriant, will need mowing once every twenty days, taking care to cut it evenly, not leaving any marks of the grass blade.—Dahlias, that started well into growth, may be tied to neat stakes, painted green, a shade lighter than the foliage, which will give them a neat appearance. Should the weather set in dry, water them twice a week freely.—Bedding out plants, such as Verbenas, Petunia, Helitrope, Geranium, Fuschia, and other plants for Summer display, may now be planted out with safety, shading the most delicate the first three or four days from the direct rays of the sun, removing the shades at sundown and replacing them two hours after sunrise in the morning.

Greenhouse.—The inmates of the greenhouse may now be gradually hardened, preparatory to their removal to summer quarters. Leave the house open at night, and shade the plants from the direct rays of the sun by day. When removed from the green-house select a position where the sun cannot strike them after ten o'clock in the morning; sprinkle them over head freely every night, just before sundown; shift those plants which need it, into larger pots, never using one more than two sizes larger than the one they previously grew in.

WM. H. HAMILTON, Florist.
Raleigh, N. C.

## Shrubs for the Lawn.

One of the first in the order of flowering shrubs, is the *Duphne mezereum*, popularly called Mezereon. This plant is a native of Europe. It is a low shrub, attaining the height of four feet, and is greatly admired for its beautiful and fragrant flowers and bright red berries. "The French call it 'genteel wood,' and 'pretty wood;' the Italians, 'the fair plant;' the Germans, 'silky bark;' and even the grave Spaniards term it 'the lady laurel.'" The flowers, which are pink in one variety and white in another, literally cover the plant, in March or early in April. The berries as well as the whole plant, are highly poisonous when eaten; and children, to whom they are attractive, should be taughtno t to pluck them.

# MECHANICAL.

## Another North Carolina Patent.

Mr. F. M. Walker, of Greensboro', has recently obtained a Patent for a machine for Husking Corn. The Editors of the Greensboro' Patriot say—"We have seen this machine in operation, and can safely say that it is no humbug, it husks corn with great rapidity, and is both strong and simple and not liable to get out of repair. We consider that the days of the old fashioned corn huskings are numbered; for one good hand can with this machine husk in one day from 35 to 40 barrels of corn. The farmers of North Carolina are greatly indebted to Mr. Walker for his invention, and we feel confident his machine will come into general use, so soon as its virtues are known."

## Coal Oil.

We find the following notice of a new kind of oil in the Baltimore American. We have been buruing this oil for a few weeks past, and find it much cheaper than adamantine or sperm candles, or winter strained sperm oil. (As for burning fluids and camphene, we have considered them so extremely dangerous that we have never allowed them to come into our house.) The kerosene oil at $1 a gallon is, for the quantity of light given, far the cheapest burning fluid that we are acquainted with, whilst it is perfectly safe.

We wish further to say of it, that the Deep River Coal is the very best material from which this oil can be made. And we learn that lubricating oil can be made of this coal for 8 cents a gallon, and that for 20 cents a gallon more, this oil can be purified for burning. When so purified, it was worth in New York, until lately, 75 cents, then $1, and now, we understand, $1 25 a gallon.—The opening to the world of the valley of Deep River will bring into operation this manufacture as well as others as yet undreamed of by the supine possessors of so much wealth as lies there hidden, or no better than hidden. Speed the rail road, and let it get within the world's view!

Kerosene Oil.—This is a newly discovered oil distilled from Coal which is free from sulphur. In lamps properly constructed it burns with an extremely brilliant but small flame, and diffuses more light than any other article of the kind. It is also said to be non-explosive, and hence its entire adaptation to use wherever gass is not obtainable. We have tried one of the lamps and found it to give an extremely pleasant and very abundant light. In point of economy it is said to be superior to other burning fluids, and there is no doubt it will in time supersede all other oils, whether sperm, lard or camphene.

In the manufacture of this oil, we are informed that the product of the still is composed of lamp oil, lubricating oil machinery, and a substance resembling white wax or tallow, which can be made into candles superior in appearance and brilliancy of light to the best sperm or wax, and at far less cost. These will soon come into market, when their merits may be judged of. The manufacture is yet in its infancy, and will no doubt be greatly improved as the properties of the distilled articles become better known.

## GOLDFINDER.

THIS ELEGANT HORSE, will stand the present season at my Stables, at Rocky Mount Mills, in Edgecombe county.

Terms.—Forty dollars ($40) the season, with one dollar to Groom. Mares from a distance will be well cared for—but no risk assumed—at Rocky Mount at 37½ cents per day.

Pedigree.—Goldfinder was by Hill's Vermont Black Hawk out of a Messenger Mare.

WM. S. BATTLE.

April, '58. 5—2m.

### DESCRIPTION.

[From the April No. of the N. C. Planter.]

"Goldfinder" is a beautiful jet black—a perfect model of a horse for symmetry and beauty; nearly six years old, 15½ hands high; has great speed, power and endurance, very muscular and large bone. His ancestry is pure, being sired by the old Vermont Black Hawk out of a "Messengor" mare. He is claimed to be the beauty and pride of all the Black Hawks. His speed, as a trotter, may be judged from his exercising on our State Fair track, when he was timed by some of our citizens who were looking on: He turned the track in 53 seconds—distance one-third of a mile and 70 feet. He is a half brother to the fastest trotting Stallion in the world—Ethan Allen.

The Morgan stock is celebrated for all practical purposes, (except a running horse,) for beauty, style, action, draft and speed—very healthy and hardy—and with an eye that no other horse has. No one can fail to notice to admiration the eye of "Goldfinder," it is yellow, with deep blue sight—being emphatically the "Hawk's eye."

# LIST OF PREMIUMS,

*To be awarded at the Annual Fair of the North Carolina State Agricultural Society, to be held at the State Fair Grounds at Raleigh, November* 2, 3, 4, 5, 6, 1858.

## Experiments and Essays.

### EXPERIMENTS.

For each of the two best experiments, or series of experiments, on any of the following subjects, a premium as follows:

1. Effects (in profit or loss) of the usual mode of saving corn-fodder, by stripping the green blades and cutting off the tops $10

2. Cost and effects of subsoil plowing under different circumstances of soil and sub-soil, 10

3. Action or non-action of lime as manure, above the falls of the tide water rivers, 10

4. Action or non-action of gypsum below the falls of the tide-water rivers, and on soils respectively rich and originally poor, and on the latter after, as well as before their being made calcareous, 10

5. Costs and effects of bone-dust, (or phosphate of lime,) as manure, 10

6. How late, in reference to the growth, the last tillage (by plow or cultivator,) should be given to corn for the best product; and whether the said last tillage should be shallow or deep, 5

7. Best series of comparative experiments in the cultivation of corn, 10

8. Benefits and products of guano, compared to costs; to be tested by not less than three different experiments, made under circumstances more or less different, 10

9. Benefits or profit of preserving or applying human excrements as manure, whether prepared for sale and distant transportation, or otherwise, but the whole operation to be in North Carolina, 10

10. Tide marsh mud, or swamp muck, or peaty soil, (either kind to be accurately described and characterized,) as manure, in compost with lime or otherwise, 10

11. Value of charcoal as an aid to fertility, 5

12. *Tobacco.*—Culture, cost and profits of cultivating, and comparative effects on production, from different distances of planting, modes of priming, topping, &c., comprising at least three different experiments, 10

13. Cultivation and comparative feeding value of rye, 5

14. Planting, culture, pruning and supporting in open Vineyards different varieties of Grape Vines for the table, or making of wine, 10

### ESSAYS.

For each of the best five, on any of the following subjects, a premium, as follows:

1. On improving and enriching poor land—whether naturally poor, or naturally rich, or good, and subsequently exhausted by severe cropping, 5

2. On draining, 5

3. On rotation of crops, 5

4. On the accumulation, preparation and application of stock yard and stable manure, 10

5. On the formation and constituents of composts and the application of them, 10

6. On the "green sand" or gypseous earth of lower North Carolina as manure, and the facts and causes of effect or non-effect, 5

7. On the properties and value of the Southern Pea, (or "cornfield pea" of any variety,) and the culture thereof, whether for saving the pea ripened, or ploughing under the growth, green or dry, for manure, and as a preparation for wheat or other grain crops, and as food for swine and other stock, 5

8. On the comparative profit of planting and farming, and of the two combined—improvement of land being considered, 10

## Field Crops.

To be awarded by the Executive Committee, at a meeting to be held for that purpose in January 1859.

Best crop of Wheat of not less than 20 acres, nor less than 30 bushels per acre, $50

Best crop of Wheat, not less than 5 acres, nor less than forty bushels per acre, 40

Second best crop of Wheat, not less than 5 acres, 25

Best crop of Indian Corn, not less than 25 acres, nor less than 50 bushels per acre, 50

Best crop of Indian Corn, not less than 5 acres of reclaimed or improved land, to be shelled and weighed between the 15th November and 15th December, not less than 100 bushels per acre, 25

Best crop of Indian Corn, not less than 2 acres, nor less than 100 bushels per acre, 20

Best crop of Barley, not less than 1 acre, nor less than 50 bushels per acre, 10

Best crop of Rye, not less than 10 acres, nor less than 20 bushels per acre, 20

Best crop of Oats, not less than 10 acres, nor less than 40 bushels of clean oats, per acre. Two average acres to be thrashed, 20

Best crop of Buckwheat, not less than two acres, nor less than 30 bushels per acre, 10

Best crop of Rice, not less than 50 acres, nor less than 70 bushels per acre, (in the rough,) 50

Best crop of Rice, not less than 5 acres, and not less than 85 bushels per acre, (in the rough,) 25

| | |
|---|---|
| Best crop of Peas not less than 5 acres, nor less than 25 bushels per acre, | 20 |
| Best crop of Peas on one acre, not less than 30 bushels per acre, | 10 |
| Best acre of Navy Beans, not less than 50 bushels, | 20 |
| Best crop of Ground Peas, not less than 1 acre, nor less than 75 bushels per acre, | 10 |
| Best crop of Ground Peas, not less than 20 acres, nor less than 50 bushels per acre, | 10 |
| Best crop of Cotton, on not less than 50 acres, nor less than 1250 lbs. per acre, | 50 |
| Best crop of Cotton on not less than 5 acres, nor less than 1600 lbs. per acre, | 25 |
| Best crop of Timothy, Orchard Grass, Blue Grass, Feather Grass, or Herds Grass Hay, raised on 25 acres, one bale, weighing not less than 250 lbs, as a sample, | 25 |
| Best 4 acres of Hay, of the same kind, not less than 2½ tons to the acre, | 15 |
| Best crop of Sweet Potatoes, on not less than 1 acre, nor less than 300 bushels per acre, | 15 |
| Best crop of Irish Potatoes, not less than ½ acre, nor less than 300 bushels per acre, | 15 |
| Best crop of Turnips, not less than ½ acre, nor less than 500 bushels per acre, | 15 |
| Best crop of Turnips, not less than 2 acres, | 15 |
| Best crop of Beets, not less than ½ acre, nor less than 400 bushels per acre, | 10 |
| Best crop of Carrots, (with same conditions as for Beets,) | 10 |
| Best crop of Tobacco, combining quantity and quality, not less than 100,000 hills, samples of not less than 2 lbs. of 1st, 2d and 3rd qualities, to be furnished the Committee by the 1st of January, 1858. | 50 |
| Best 16,000 hills Tobacco, with same conditions, | 25 |
| Best crop of ½ acre of Hops, with full account of cultivation and preservation, | 15 |
| Best crop of ½ acre of Flax, with same account as above, | 15 |
| Best crop of Broom Corn, not less than 1 acre, one bale, weighing not less than 150 lbs. sent as a sample, | 15 |

### *Statement to be made by Competitors on Field Crops.*

1. The land must be measured by some competent person, who shall make affidavit of the accuracy of the measurement, and the quantity of the ground.

2. The applicant shall make affidavit, according to the forms annexed, to the quantity of grain raised on the ground, entered on the premium list, which affidavit must accompany the application for premiums, together with a sample of the grain or other product.

3. The principle object of the Society being to promote profitable cultivation, it does not offer premiums for crops produced by extravagant expenditure; therefore a detailed, certified account of the expense of cultivation, must be made; the expense of labor and manures stated and the kind of manure used.

4. The kind and condition of the soil; the quantity and kind of seed used; the time and mode of planting or sowing stated. Samples of grain and vegetables produced, to be exhited at the State Fair, where practicable, and also to be sent to the Executive Committee, at Raleigh, prior to the meeting of the Committee in January, 1859.

5. The grain must either be weigh ed or measured in a legal half bushel; corn to be measured in the ear, and an average specimen of not less than four barrels of average quality of ears shelled, cleaned, and weighed or measured, as above, after the 15th of Nov., and the number of bushels thus estimated, stated in the affidavit.

#### FORM OF AN AFFIDAVIT.

——— County, S. S.—A. B., being duly sworn, says he accurately measured the land upon which C. D, raised a crop of ——— the past season, and the quantity of the land is——— acres and no more.

[Signed,] A. B.

Sworn to before me, this———day of———
185 .

——— County, S.S.—C. D., being sworn, says he raised a crop of———the present season upon the land measured by A.B., and that the quantity of grain raised thereon was——— bushels and no more, (or measured in a sealed half bushel as the case may be,) and that the statements in regard to the manner of cultivation, &c., are correct, to the best of my knowledge.

[Signed,] C.D.

Sworn to before me, this———day of———,
185 .

———————Justice.

## Class A.

PAUL C. CAMERON, *Superintendent.*

## HORSES.

### No. 1.—THOROUGHBREDS.

| | |
|---|---|
| Best Stallion, 4 years old and over, | $50 |
| 2d " " " " | 25 |
| Best Stallion, 2 years and under 4, | 15 |
| 2d " " " " | 10 |
| Best Brood Mare, 4 years and over, | 20 |
| Best Brood Mare, 4 years and over, with foal by her side, | 25 |
| 2d Best Brood Mare, 4 years and over, with foal by her side, | 15 |
| Best Filly, 2 and under 4 years, | 10 |
| 2d " " " " | 5 |

### No. 2.—QUICK DRAFT AND SADDLE HORSES.

| | |
|---|---|
| Best Stallion, 4 years and over | $50 |
| 2d " " " " | 25 |
| Best Stallion, 3 years and under 4, | 25 |
| 2d " " " " | 15 |
| Best Stallion, 1 year and under 2, | 10 |
| 2d " " " " | 5 |
| Best Brood Mare, 4 years and over, | 20 |
| 2d " " " " | 10 |
| Best Brood Mare, 4 years and over, with foal by her side, | 25 |
| 2d Best Brood Mare, 4 years and over, with foal by her side, | 15 |
| Best Filly, 2 years and under 4, | 10 |
| 2d " " " " | 5 |
| Best Saddle Horse, Mare or Gelding, | 15 |
| 2d " " " " | 10 |
| Best pair Matched Carriage Horses, | 20 |
| 2d " " " " | 10 |
| Best pair Matched Carriage Horses, raisin the State, | 20 |
| 2d Best pair Matched Carriage Horses, raised in the State, | 10 |
| Best Single Harness Horse, | 15 |
| 2d " " " " | 10 |
| Best Single Harness Horse, raised in the State, | 15 |
| 2d Best Single Harness Horse raised in the State, | 10 |

In this class, individual excellence in form, action and disposition, will be regarded as chief points of merit.

### No. 3.—HEAVY DRAFT HORSES.

| | |
|---|---|
| Best Stallion, 4 years and over, | $25 |
| 2d " " " " | 10 |
| Best Stallion, 2 years and under 4, | 10 |
| 2d " " " " | 5 |
| Best Stallion, 1 year and under 2, | 5 |
| 2d " " " " | 2 |
| Best Brood Mare, 4 years and over, with foal by her side, | 15 |
| 2d Best Brood Mare, 4 years and over with foal by her side, | 10 |
| Best Filly, 2 years and under 4, | 10 |
| 2d " " " " | 5 |
| Best pair of Heavy Draft Horses raised in the State, | 10 |
| 2d Best pair of Heavy Draft Horses, raised in the State, | 5 |

### No. 4.—JACKS AND JENNETS.

| | |
|---|---|
| Best Imported Jack, with approved certificates. | $25 |
| Best Jack, raised in the State. | 15 |
| " " from any other State. | 15 |
| Best Imported Jennet, with approved certificate. | 15 |
| Best Jennet, raised in the State, | 10 |
| " " from any other State, | 10 |

### No 5.—MULES.

| | |
|---|---|
| Best pair of Mules, 3 years and over, | $20 |
| 2d " " " " | 10 |
| Best pair of Mules, 3 years and over, raised inthe State, | 20 |
| 2d " " " " " | 10 |
| Best single Mule, | 10 |
| 2d " " | 5 |

## Class B.

CHAS. L. HINTON, *Superintendent.*

### CATTLE, SHEEP, GOATS, SWINE, AND POULTRY.

### No. 6.—CATTLE—NORTH DEVONS.

| | |
|---|---|
| Best Bull, 4 years and over, | $25 |
| 2d " " " " | 15 |
| Best Bull, 3 years and under 4 | 20 |
| 2d " " " " | 10 |
| Best Bull Calf, 2 years and under 3 | 15 |
| 2d " " " " " | 10 |
| Best Bull Calf, 1 year and under 2 | 10 |
| Best Bull Calf, under 1 year, | 5 |
| Best Cow, 3 years and over, | 10 |
| 2d " " " | 5 |
| Best Heifer, 2 years and under 3, | 10 |
| Best Heifer, 1 year and under 2, | 10 |
| Best Heifer, under 1 year, | 5 |

### No. 7.—DURHAMS.

The same premiums as for Devons.

### No. 8.—HEREFORDS.

The same premiums as for Devons.

### No. 9.—AYRSHIRES.

The same Premiums as for Devons.

### No. 10.—HOLSTEINS.

The same premiums as for Devons.

### No. 11.—ALDERNEYS AND JERSEYS.

The same premiums as for Devons.

It is to be understood that in all the foregoing classes, the animals must be of pure blood.

### No. 12.—GRADES.

The same premiums as for Devons.

### No. 13.—NATIVES.

The same premiums as for Devons.

### No. 14.—IMPORTED CATTLE.

| | |
|---|---|
| Best Bull, 3 years and over, | $25 |
| 2d " " " | 10 |
| Best Cow, 3 years and over, | 10 |
| 2d " " " | 10 |

When the word "Imported" is used, it is understood the animal must be brought from beyond the United States, with a well authenticated pedigree.

### No. 15.—MILCH COWS.

| | |
|---|---|
| Best Milch Cow giving not less than 20 quarts a day, | $15 |
| 2d Best Milch Cow, giving not less than 20 quarts a day, | 5 |
| Best Milch Cow, giving not less than 20 quarts a day, raised in the State, | 15 |
| 2d Best Milch Cow, giving not less than 20 quarts a day, raised in the State, | 5 |

### No. 16.—WORKING OXEN.

| | |
|---|---|
| Best Yoke of Oxen, | $15 |
| 2d " " " | 5 |

A cart will be provided to test the working qualities of the Oxen.

### No. 17.— FAT CATTLE.

| | |
|---|---|
| Best pair of fat Steers or Oxen, | $12 |
| 2d “ “ “ “ | 5 |
| Best Fat Steer, | 5 |
| 2d “ “ | 3 |
| Best Fat Cow, | 5 |
| 2d “ “ | 3 |
| Best Fat Heifer, | 5 |
| 2d “ “ | 3 |

Applicants for premiums for Fat Cattle must furnish statements of the manner of feeding.

☞ Judges on Fat Cattle will give particular attention to the animals submitted to them for examination.

It is believed that all other things being equal, those are the best cattle that have the greatest weight in the smallest superficies.

The cattle to be judged as Fat Cattle, will all be weighed, and the Judges will take measure to get the superficies of each.

### No. 18.—SHEEP—MERINOS.

| | |
|---|---|
| Best Buck, | $15 |
| 2d “ “ | 10 |
| Best Pen of Ewes, not less than 3, | 15 |
| 2d “ “ “ “ | 10 |
| Best Pen of Lambs, not less than 3, | 1 |
| 2d “ “ “ “ | 5 |

### No. 19.—COTSWOLDS.

The same premiums as for Merinos,

### No. 20.—SAXONS.

The same premiums as for Merinos.

### No. 21.—SOUTH DOWNS.

The same premiums as for Merinos.

### No. 22.—LEICESTER.

The same premiums as for Merinos.

### No. 23.—NATIVES OR GRADES.

| | |
|---|---|
| Best Buck, | $10 |
| 2d “ “ | 5 |
| Best pen of Ewes, not less than 3, | 15 |
| 2d “ “ “ “ | 5 |
| Best Pen of Lambs, not less than 3, | 5 |
| 2d “ “ “ “ | 3 |
| Best Pen of Fat Wethers, | 10 |

### No. 24.—GOATS.

| | |
|---|---|
| Best pair Cashmere Goats, | $15 |
| Best pair of Alpacca Goats, | 10 |

### No. 25.—SWINE—LARGE BREED.

| | |
|---|---|
| Best Boar over 2 years old, | $10 |
| 2d “ “ “ “ | 5 |
| Best Boar over 1 year old and under 2, | 5 |
| 2d “ “ “ “ | 3 |
| Best Sow over 2 years old, | 5 |
| 2d “ “ “ | 3 |
| Best Sow over 1, and under 2 years old, | 5 |
| 2d “ “ “ “ | 3 |
| Best Breeding Sow with not less than 6 pigs, | 10 |
| 2d best Breeding Sow with not less than 6 pigs, | 5 |
| Best Lot of Pigs, (not less than 6) under 10 months old, | 6 |
| 2d best Lot of Pigs (not less than 6) under 10 months old, | 3 |

This Class includes Chester, Berkshire, Hampshire, Graziers, Leicester, Bedford or Woburn.

### No. 26.—SWINE—SMALL BREED.

The same premiums as for large Breed.

This class includes Suffolk, Neapoliton Chinese, Essex, Guinea, Mocha, Snap-Dragon.

### No. 27.—GRADES.

Same premiums as for Large Breeds.

### No. 28.—NATIVES.

The same premiums as for Large Breeds.

### No. 29.—POULTRY.

| | |
|---|---|
| Best trio of Buff or Red Shanghais, | $3 |
| “ “ Gray or Bramah Pootras, | 3 |
| “ “ Dorkings, | 3 |
| “ “ Polands or Top Knots, | 3 |
| “ “ Black Spanish, | 3 |
| “ “ Hamburghs, | 3 |
| “ “ Seabright Bantams, | 3 |
| Best Lot of Games, | 3 |
| “ “ Sumatra Games, | 3 |
| “ “ Wild Indian Games, | 3 |
| Best Pair of Wild Turkeys, | 3 |
| “ “ Domestic Turkeys, | 3 |
| “ “ Wild Geese, | 3 |
| “ “ Bremen Geese, | 3 |
| “ “ Hong Kong Geese, | 3 |
| “ “ Common Geese, | 3 |
| “ “ Muscovey Ducks, | 3 |
| “ “ Rouen “ | 3 |
| “ “ Aylesbury “ | 3 |
| “ “ Common, “ | 3 |
| “ “ Pea Fowls, | 3 |
| Best Trio of Guinea Fowls, | 3 |
| “ “ Capons, | 3 |
| “ Caponed Turkey, | 3 |
| “ and largest collection owned by the exhibitor, | 10 |

---

## Class C.

WM. R. POOL, *Superintendent.*

### No. 30.—AGRICULTURAL PRODUCTIONS.

| | |
|---|---|
| Best variety of Wheat, 1 bushel as sample, | $3 |
| “ “ Corn for Bread, “ | 3 |
| “ “ Corn for Stock, “ | 3 |
| “ “ Oats, “ | 3 |
| “ “ Rye, “ | 3 |
| “ “ Barley, “ | 3 |
| “ “ Rice, “ | 3 |
| “ “ Field Peas, “ | 3 |
| “ “ Beans, “ | 3 |
| “ “ Ground Peas, “ | 3 |
| “ “ S. Potatoes, a few cooked. | 3 |
| “ “ Irish “ “ | 3 |
| “ “ Cotton, 2 stalks as sample, | 3 |
| “ “ Grass Seeds, adapted to the South for Hay or Grazing. | 3 |
| Best and greatest variety of the above articles, raised on one farm, | 10 |

### No. 38.—FRUIT TREES ADAPTED TO THE SOUTH.

| | |
|---|---|
| Largest and best variety of Apple trees, | $10 |
| " " " Pear " | 10 |
| " " " Peach " | 10 |
| " " " Cherry " | 10 |
| " " " Nectarine " | 5 |
| " " " Apricot " | 5 |
| " " " Plum " | 5 |
| " " " Strawb'y vines | 2 |
| " " " Raspberry " | 2 |
| " " " Gooseberry " | 2 |

### No. 39.—VEGETABLES.

| | |
|---|---|
| Best Celery, 6 stalks, | $2 |
| " Cauliflower, 6 heads, | 2 |
| " Brocoli, " | 2 |
| " Cabbage, six " | 2 |
| " Egg Plants, six " | 2 |
| " Squashes, six " | 2 |
| " Pumpkins, two, | 2 |
| " Onions, 1 peck, | 2 |
| " Beets for Table, six, | 2 |
| " " Sugar, " | 2 |
| " Parsnips, " | 2 |
| " Turnips " | 2 |
| " Carrots, " | 2 |
| " Salsify, " | 2 |
| " Irish Potatoes, one bushel, | 2 |
| " Sweet " " | 2 |

## Class D.

WILSON W. WHITAKER *Superintendent*

### No. 40.—PLOWS.

| | |
|---|---|
| Best three horse Plow, | $6 |
| " " " manufactured in the State, | 6 |
| Best two horse Plow, | 5 |
| 2d " " " | 4 |
| Best " " " manufactured in the State, | 5 |
| 2d best two horse Plow manufactured in the State, | 4 |
| Best single horse Plow, | 4 |
| 2d " " " | 3 |
| Best Single horse Plow manufactured in the State, | 4 |
| 2d best single horse plow manufactured in the State, | 3 |
| Best Sub-soil Plow, | 5 |
| 2d " " | 4 |
| Best sub-soil Plow manufactured in the State, | 5 |
| 2d best sub-soil Plow manufactured in the State, | 4 |
| Best Double-mouldboard Plow, | 5 |
| 2d " " " | 4 |
| Best Double-mouldboard Plow manufactured in the State, | 5 |
| 2d Best Double-mouldboard Plow manufac- in the State, | 4 |
| Best wrought turning plow, manufactured in the State, | 5 |
| Best Potatoe Digger, | 5 |

### No. 41.—HARROWS, PLANTERS AND SOWERS, ROLLERS, CULTIVATORS & GRAIN DRILLS.

| | |
|---|---|
| Best Harrow, | $5 |
| 2d " " | 2 |
| Best Seed Planter for horse or hand power, for hills or drills, | 5 |
| 2d best Seed Planter for horse or hand power, for hills or drills, | 2 |
| Best Horse Corn Planter, | 5 |
| 2d " " " | 2 |
| Best Hand Corn Planter, | 5 |
| 2d " " " | 2 |
| 2d " " | 2 |
| Best Planter for Small seed, | 5 |
| Best Broad cast Sower, | 5 |
| 2d " " " | 2 |
| Best Iron Roller (smooth,) | 5 |
| " Roller for crushing clods, (serrated) | 5 |
| " Cultivator for general purposes, | 5 |
| 2d " " " " | 2 |
| Best Corn Cultivator, | 5 |
| 2d " " " | 2 |
| Best Wheat Drill, | 5 |
| 2d " " | 2 |
| Best Cotton Scraper, | 5 |

### No. 42.—THRESHING MACHINES, FANNING MILLS, HAY, STRAW, STALK AND VEGETABLE CUTTERS.

| | |
|---|---|
| Best Threshing Machine, | $15 |
| " do. manufactured in the State, | 15 |
| Best Fanning Mill, | 10 |
| 2d " " | 5 |
| Best Hay, Stalk and Straw Cutter, | 10 |
| 2d " " " " | 5 |
| Best Aay and Straw Cutter, | 10 |
| 2d " " " | 5 |
| Best do. manufactured in the State, | 10 |
| 2d " " " " " | 5 |
| Best Vegetable Cutter for Stock, | 5 |

### No. 43—CORN SHELLERS AND CRUSHERS.

| | |
|---|---|
| Best Corn Sheller, Horse Power, | $10 |
| 2d " " " " | 5 |
| Best " Hand Power, | 10 |
| 2d " " " | 5 |
| Best Corn and Cob Crusher, Horse Power, | 10 |
| 2d " " " " | 5 |

## Class E.

RICHARD H. SMITH, *Superintendent.*

### No. 44—REAPING AND MOWING MACHINES, HORSE POWERS, STUMP PULLERS.

| | |
|---|---|
| Best Reaping Machine, | $20 |
| 2d " " " | 10 |
| Best Reaping Machine made in the State, | 20 |
| Best Mowing Machine, | 20 |
| 2d " " " | 10 |
| Best Sweep Horse Power, | 20 |

| | |
|---|---|
| Best Bale of Cotton, weighing not less than 400 lbs, | 10 |
| Best Specimen of Cotton in seed, not less than 50 lbs., | 5 |
| Best Specimen of Virgin Dip Turpentine, one barrel, | 3 |
| Best Specimen of Rosin, 1 barrel, | 3 |
| Best Specimen of Hemp, prepared or dressed, | 3 |
| Best Specimen of Flax, prepared or dressed, | 3 |
| Best Barrel of Cider Vinegar, | 3 |
| Best Barrel of Vinegar from Chinese Sugar Cane, | 3 |
| Best Specimen of Linseed Oil, made in the State, 1 gallon, | 3 |
| Best Specimen of Oil from any other article, | 3 |

### No. 31.—SALT PROVISIONS.

| | |
|---|---|
| Best ½ barrel Pickled or Mess Beef, sample to be cooked, | $5 |
| Best ½ barrel Pickled or Mess Pork, | 5 |
| Best ½ doz. hams, regardless of age, one to be cooked as sample, | 10 |
| Best ½ doz. Mutton or Venison hams, | 5 |
| Best barrel of Roe Herrings, | 5 |
| Best barrel of Cut Herrings, | 5 |
| Best barrel of Shad or Mullet, | 5 |

Exhibitors must state in writing the mode of Pickling the Beef and Pork, and curing and preserving the Bacon.

### No. 32.—BUTTER AND CHEESE.

| | |
|---|---|
| Best sample of Fresh Butter, not less than 10 lbs., | $10 |
| 2d Best sample of Fresh Butter, not less than 10 lbs, | 5 |
| Best Firkin of butter, not less than 80 lbs., | 10 |
| 2d " " " " | 5 |
| Best specimen of Cheese made in the State, | 5 |

The process of making and preserving the butter and cheese, and its age must be given in writing, by the Exhibitor.

### No. 33.—FLOUR, &c.

| | |
|---|---|
| Best Barrel of Wheat Flour, made from the smallest number of lbs. of Wheat, | $10 |
| 2d best barrel of Wheat Flour make from the smallest number of lbs. of wheat, | 5 |
| Best Corn meal, 2½ bushels, | 5 |
| Best Rye Flour, ½ barrel, | 5 |
| Best Buckwheat, ½ barrel, | 5 |
| Best Starch from Wheat, 3 lbs., | 3 |
| Best Starch from Potatoes, 3 lbs., | 3 |
| Best Starch from any other substance, 3 lbs., | 3 |
| Best Wheat Bread, 3 loaves, | 3 |
| 2d " " " | 2 |
| Best Corn Bread, " | 3 |
| Best Soda Crackers 10 lbs. | 3 |
| " Butter " " | 3 |
| " Water " " | 3 |
| Best Honey, ½ gallon, strained, | 3 |
| " " 10 lbs. in the comb, | 3 |

### No. 34.—PRESERVES, PICKLES, &c.

| | |
|---|---|
| Best Specimen of preserved Peaches, | $3 |
| " " " Apples, | 3 |
| " " " Plums, | 3 |
| " " " Quinces, | 3 |
| " " " Nectarines, | 3 |
| " " " Apricots, | 3 |
| " " " Pears, | 3 |
| " " " Cherries, | 3 |
| " " Green Pickles, | 3 |
| " " Yellow " | 3 |
| " " Sweet " | 3 |
| " " Fruit Jellies | 3 |
| " " Tomato Catsup, | 3 |
| " " Walnut " | 3 |
| " " Brandy Peaches, | 3 |
| " " Cordials, | 3 |
| Best half bushel of Dried Peaches, | 3 |
| " " " Pears, | 3 |
| " " " Apples, | 3 |
| " " " Figs, | 3 |
| Best 10 pounds of dried Grapes, | 3 |
| " " " Plums, | 3 |
| " " " Cherries. | 3 |
| " " " Whortleberries, | 3 |

### No. 35.—FRUIT IN CANS.

| | |
|---|---|
| Best Peaches in cans, | $3 |
| " Apricots, " | 3 |
| " Nectarines, " | 3 |
| " Grapes, " | 3 |
| " Cherries, " | 3 |
| " Gooseberries, " | 3 |
| " Currants, " | 3 |
| " Quinces, " | 3 |
| " Tomatoes, " | 3 |

### No. 36.—NATIVE WINES.

| | |
|---|---|
| Best Dry Catawba, | $5 |
| 2d " " | 2 |
| Best Sparkling Catawba, | 5 |
| Best Sparkling Wine from any other Grape, | 5 |
| 2d best Wine from any other Grape, | 2 |
| Best Wine from the Isabella Grape, | 5 |
| 2d " " " " | 2 |
| Best Wine from the Scuppernong Grape, | 5 |
| 2d " " " " | 2 |
| Best Wine from any other Grape, | 5 |
| 2d " " " " | 2 |
| Best and greatest variety of Wines, not less than 2 bottles of each, | 10 |
| Best Cider in bottles, not less than 1 doz. bottles. | 5 |

### No. 37.—FRUIT ADAPTED TO THE SOUTH.

| | |
|---|---|
| Best and greatest variety of Apples, | $10 |
| " " " Pears, | 10 |
| " " " Peaches, | 10 |
| " " " Quinces, | 5 |
| " " " Figs, | 5 |
| " " " Grapes, | 10 |
| " " " Cranberries, | 2 |

| | |
|---|---|
| 2d " " " | 10 |
| Best Railway Horse Power, | 20 |
| 2d " " " | 10 |
| Best Stump Puller, | 20 |
| 2d " " | 10 |

### No. 45.—HAY AND COTTON PRESS AND IMPLEMENTS.

| | |
|---|---|
| Best Portable Hay Press, | $10 |
| 2d " " " | 5 |
| Best Cotton Press, | 10 |
| 2d " " | 5 |
| Best Cotton Gin, | 10 |
| Best Clover Huller, | 10 |
| 2d " " | 5 |
| Best Horse Rake, | 5 |
| 2d " " | 2 |
| Best Farm or Road Scraper, | 5 |
| 2d " " " | 2 |
| Best Cider Mill, | 10 |
| 2d " " | 5 |
| Best Washing Machine, | 5 |
| 2d " " | 2 |
| Best Lime, Guano and Plaster Spreader, | 20 |
| Best Manure Spreader, | 10 |
| Best Pump for Wells, | 10 |
| 2d " " | 5 |

### No. 46.—CARRIAGES, WAGONS, CARTS &c.

| | |
|---|---|
| Best Two horse Pleasure Carriage, | $25 |
| 2d " " " " | 15 |
| Best One horse Rockaway, | 15 |
| 2d " " " | 10 |
| Best One horse Top Buggy, | 15 |
| 2d " " " | 10 |
| Best One horse Open Buggy, | 15 |
| 2d " " " | 10 |
| Best Sulky, | 15 |
| 2d " | 10 |
| Best Farm Wagon for six horses, | 15 |
| 2d " " " " | 8 |
| Best Farm Wagon for four horses, | 8 |
| 2d " " " " | 4 |
| Best Farm Wagon for 2 horses, | 8 |
| 2d " " " " | 4 |
| Best Horse Cart, (dumping,) | 8 |
| 2d " " " | 4 |
| Best Ox Cart and Yoke, | 8 |
| Best Rigging for hauling Hay Fodder or Straw, | 5 |
| Best Hand Cart, | 3 |

## Class F.

DR. WM. R. HOLT, *Superintendent.*

### No. 47.—MACHINERY.

| | |
|---|---|
| Best Steam Engine not less than 8 horse power, | $50 |
| Best Portable Saw Mill, | 20 |
| " " Grist Mill, | 15 |
| " Shingle or Stave Cutter, | 20 |
| " Sewing Machine, | 15 |
| " Smut Machine, | 10 |
| " Ditching Machine, | 5 |
| " Best Brick Machine, | 10 |

### No. 48.—FARM AND DOMESTIC TOOLS.

| | |
|---|---|
| Best Churn, | $3 |
| " Sausage Cutter, | 3 |
| " Cheese Press, | 3 |
| " Grain Cradle, | 3 |
| " Hay Knife, for cutting down hay and straw stacks, | 2 |
| Best Scythe Snathe, | 2 |
| " Briar Hook, | 2 |
| " Weeding hoes for Corn, | 2 |
| " Cotton Hoes, | 2 |
| " Three Hand Rakes made in the State, | 2 |
| Best Three Hay Forks, made in the State, | 2 |
| Best Three Axes, made in the State, | 2 |
| " Set of Horse Shoes, " " | 2 |
| " half dozen Wooden Buckets made in the State, | 2 |
| Best half doz. Wooden Tubs, made in the State, | 2 |
| Best Flour barrels, not less than three, | 3 |
| Best display of Cooper's ware, adapted to household use, made in the State, | 5 |
| Best and most numerous collection of Agricultural Implements, | 25 |
| Best and most numerous collection of Agricultural Implements manufactured in the State by the exhibitor, | 25 |

### No. 49.—SADLERY, &c

| | |
|---|---|
| Best Set of Carriage Harness, | $10 |
| 2d " " " | 5 |
| Best Buggy Harness, | 8 |
| 2d " " | 4 |
| Best Mens' Saddle, Bridle and Martingal, | 10 |
| " Womens' " " " | 5 |
| Best Cart Gear, | 3 |
| Best Plow Gear, | 3 |
| Best Plantation Cart Saddle, | 3 |

## Class G.

WM. A. EATON. *Superintendent.*

### No. 50.—CABINET WORK.

| | |
|---|---|
| Best Bedstead made in the State, | $10 |
| " " for Invalid, made in the State, | 10 |
| Best Chair for Invalid, | 5 |
| " Cradle or Crib for Children, | 3 |
| " Rocking Chair, | 3 |
| " half dozen Sitting Chairs, | 3 |
| " Centre Table, | 3 |
| " Washstand, | 2 |
| " Sofa, | 5 |
| " Wardrobe, | 5 |
| " Sideboard, | 5 |
| " Bureau, | 5 |
| " School Desk, | 3 |
| " Book Case and Secretary, | 5 |
| " Window Sash, | 5 |
| " Window Blinds, | 5 |
| " Pannel Door, | 3 |

### No. 51.—SHOES, HATS, &c.

| | |
|---|---|
| Best Pair Mens' Boots, | $3 |
| " " " | 3 |
| " half dozen Brogans, | 3 |
| " " " | 2 |
| " " Plantation Hats, | 3 |
| " " Wool Hats, | 3 |
| " Straw or Grass Hats, | 5 |

### No. 52.—SUNDRIES.

| | |
|---|---|
| Best Piano Forte, | $10 |
| " " manufactured in the State, | 10 |
| 2d best Piano Forte manufactured in the State, | 5 |
| Best Collection of Musical Instruments, | 10 |
| " lot of Guns, | 5 |
| " Stone Ware, | 5 |
| " Earthern ware, | 5 |
| " Cast (hollow) Ware, | 5 |
| " Leather, Sole, Calf and Kip, | 5 |
| " Side of Harness Leather, | 2 |
| " Dressed Buck, Sheep or Goat Skins, | 2 |
| " Best and greatest variety of Edge Tools, Augers, &c., | 10 |
| Best and greatest variety of Mechanics' tools manufactured in the State, | 10 |
| Best variety of Tallow, 25 lbs., with process of making, | 5 |
| Best lot of Soap, 30 lbs., with process of making, | 5 |
| Best specimen of Toilet soap, with process of making, | 3 |
| Best Specimen of Shaving Soap, with process of making, | 3 |
| Best dozen of Brooms manufactured in the State, | 5 |
| Best dozen Hearth Brooms manufactur- in the State, | 4 |
| Best Dozen of Whisk Brooms manufactured in the State. | 4 |
| Best Barrel of North Carolina Lime, | 5 |
| Best Set of Knives and Forks, manufactured in the State. | 5 |
| Best Carriage or Wagon Hubs, manufactured by machinery. | 5 |
| Best Railway rolled iron, not less than one ton, manufactured in the State, | 15 |
| Best Pig Iron, do do | 15 |
| Best Hammered Bar Iron, not less than one ton manufactured south of the Potomac, | 25 |

## Class H.

WELDON N. EDWARDS, *Superintendent*.

### No. 53.—MILL FABRICS.

| | |
|---|---|
| Best piece, not less than 15 yds., Cassimere. | $10 |
| Best piece, not less than 15 yds Sattinette. | 6 |
| Best piece, not less than 15 yds. Woolen Jeans, | 5 |
| Best piece, not less than 15 yds. Linsey or Kersey, for negro clothing. | 10 |
| Best piece, not less than 15 yds. Flannel, | 5 |
| " pair of Blankets, | 5 |
| " piece, not less than 30 yds., cotton Oznaburgs. | 5 |
| Best piece, not less than 24 yds, Woolen Carpet, | 10 |
| Best Hearth Rug, | 3 |
| " piece of cotton Shirting or Sheeting, | 5 |
| " " Bed Ticking, | 5 |
| " " Cotton Jeans, | 5 |
| " Bale Cotton Yarns, all numbers, | 5 |
| " Lot of Cotton twine, | 3 |
| " Bundle of Printing Paper, | 5 |
| " " Colored or Envelope paper, | 5 |
| " " Wrapping paper, | 5 |
| " Coil of Rope, Hemp or Cotton, | 5 |
| " Hair Mattrass, | 10 |
| " Mattrass of Moss, Shucks or Cotton, | 5 |

### No. 54.—HOUSEHOLD FABRICS.

| | |
|---|---|
| Best Patch work Quilt, (Cotton,) | $5 |
| 2d " " " " | 2 |
| Best " " (Silk.) | 5 |
| 2d " " " " | 2 |
| Best Raised work Quilt, | 5 |
| 2d " " " " | 2 |
| Best Counterpane, (woven,) | 5 |
| 2d " " " | 2 |
| Best Counterpane, (Knit,) | 5 |
| 2d " " " | 2 |
| Best Counterpane, (Crochet,) | 5 |
| 2d " " " | 2 |
| Best Hearth Rug, | 5 |
| 2d " " " | 2 |
| Best Pair Yarn Hose, | 2 |
| 2d " " " | 1 |
| Best Pair Silk Hose, | 2 |
| 2d " " " | 1 |
| Best Woolen Shawl, | 3 |
| 2d " " " | 1 |
| Best Foot Mat, | 2 |
| 2d " " | 1 |
| Best piece 18 yds. Negro Woolen Cloth, | 5 |
| " " 10 yds. Tow Cloth, | 5 |
| " " " Tow and Cotton Cloth, | 3 |
| " " " Linen, | 5 |

[Our form is full, and we are compelled to defer till next number the articles embraced under the heads—Fine Crochet Work in Spool Cotton—Raised Worsted Work—Embroidery in Silk—Embroidery in Cotton—Do. in Worsted—Knitting or Netting—and Fancy Work.—EDS. PLANTER.

## PROSPECTUS

## OF THE

# "North Carolina Planter."

The present is the fifth number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

Will they do it?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support,* he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ Postmasters and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher.
Raleigh, N. C.

Col. Wm d Lenoir

JUNE NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO
THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

A. M. GORMAN, Publisher, Raleigh, N. C.
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

# LIST OF PREMIUMS.

*For next State Fair, November 2d, 3d, 4th, 5th, and 6th.*

[CONCLUDED FROM OUR MAY NUMBER.]

## Class I.

JNO. L. DANCY, *Superintendant.*

### No. 55.—FINE CROCHET WORK IN SPOOL COTTON &C.

| | |
|---|---|
| Best Collar, in Spool Cotton, | $6 |
| 2d " " " " | 3 |
| Best Chemisette, " | 6 |
| 2d " " " " | 3 |
| Best Undersleeves, in Spool Cotton, | 6 |
| 2d " " " " " | 3 |
| Best Infant's Cap, " " | 6 |
| 2d " " " " " | 3 |
| Best Specimen of Lace, " | 6 |
| 2d " " " " " | 3 |
| Best Berthe Cap, " " | 6 |
| 2d " " " " " | 3 |
| Best specimen of Crochet Work, in silk, with Beads, | 6 |
| 2d " " " " " | 3 |
| Best Crocheted Shawl, | 6 |
| 2d " " " | 3 |
| Best Set of Table Mats in Gidy Cotton, | 3 |
| 2d " " " " " | 2 |
| Best Gidy, in Tidy Cotton, | 3 |
| 2d " " " " " | 2 |

### No. 56.—RAISED WORSTED WORK.

| | |
|---|---|
| Best Piano Cover, | 6 |
| " Table Cover, | 6 |
| " Hearth Rug, | 6 |
| " Chair Cover, | 3 |
| " Ottoman Cover, | 3 |
| " Lamp or Vase Mat, | 1 |

### No. 57.—EMBROIDERY IN SILK.

| | |
|---|---|
| Best Lady's Dress, | 6 |
| 2d " " " | 3 |
| Best Lady's Shawl, | 6 |
| 2d " " " | 3 |
| Best Lady's Mantle, | 6 |
| 2d " " " | 3 |
| Best Lady's Scarf or Neck Tie, | 4 |
| 2d " " " " " | 2 |
| Best Lady's Apron, | 4 |
| 2d " " " | 2 |
| Best Vest. | 6 |
| 2d " " | 3 |
| Best Child's Dress, | 6 |
| 2d " " " | 3 |
| Best Sack or Spencer, | 6 |
| 2d " " " | 3 |
| Best Boy's Jacket, | 6 |
| 2d " " " | 3 |
| Best Infant's Cloak or Blanket, | 6 |
| 2d " " " " | 3 |

### No. 53.—EMBROIDERY IN COTTON.

| | |
|---|---|
| Best Child's Dress, | $4 |
| 2d " " " | 2 |
| Best Sack or Spencer, | 4 |
| 2d " " " | 2 |

### No. 58.—EMBROIDERY IN WORSTED.

| | |
|---|---|
| Best Child's Dress, | 4 |
| 2d " " " | 2 |
| Best Piano Cover, | 4 |
| 2d " " " | 2 |
| Best Table Cover, | 2 |
| 2d " " " | 2 |
| Best Chair Cover, | 4 |
| 2d " " " | 4 |
| Best Ottoman Cover, | 2 |
| 2d " " " | 2 |
| Best Hearth Rug, | 4 |
| 2d " " " | 2 |
| Best Lamp or Vase Mat, | 1 |

### No. 59.—KNITTING OR NETTING.

| | |
|---|---|
| Best speimen of Knitting or Netting, in Wool, | $3 |
| 2d best specimen of Knitting or Netting, in Wool, | 2 |
| 3d best specimen of Knitting or Netting, in Wool, | 1 |
| Best specimen of Knitting or Netting in Cotton, | 3 |
| 2d best specimen of Knitting or Netting in Cotton, | 2 |
| 3d best specimen of Knitting or Netting in Cotton, | 1 |
| Best specimen of Knitting or Netting in Silk, | 3 |
| 2d best specimen of Knitting or Netting in Silk, | 2 |
| 3d best specimen of Knitting or Netting in Silk, | 1 |
| Best specimen of Knitting or Netting in Silk, with Beads, | 3 |
| 2d best specimen of Knitting or Netting in Silk, with Beads, | 2 |

### No. 60.—FANCY WORK.

| | |
|---|---|
| Best ornamental Shell Work, | 5 |
| 2d " " " | 2 |
| Best specimen of Wax Flowers, | 5 |
| 2d " " " | 2 |
| Best specimen of Feather Work, | 5 |
| 2d " " " | 2 |
| Best specimen of Hair Work, | 5 |
| 2d " " " | 2 |
| Best Frame, Leather Work, | 5 |
| 2d " " " | 2 |

### No. 61.—NEEDLEWORK.

| | |
|---|---|
| Best Collar and Chemisette, | 6 |
| 2d " " " " | 3 |

[*Continued on page 3 of Cover.*]

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., JUNE, 1858. NO. 6.

## AN ESSAY

## On Horizontal Plowing, and Hill-Side Ditching.

BY. N. T. SORSBY, M. D., OF ALA.

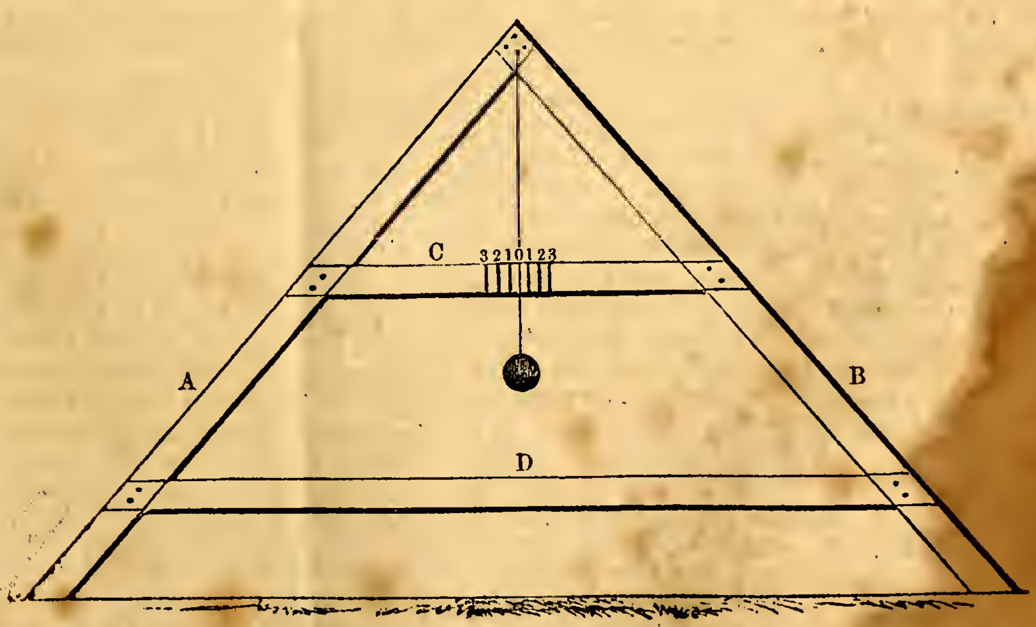
[Copy Right Reserved.]

CONCLUDED FROM OUR MAY NUMBER.

### SECTION XX.

The Span, or Rafter-level. Of the many leveling instruments in use among Horizontalers, the above is the best, because it is the simplest, the easiest of application, and is most generally employed. Besides, any carpenter can make it.

In horizontaling land, it is necessary to success to keep a perfect level of the rows in the level culture, and a uniform fall of them and the drains in the grading system. The most convenient and handy level, is made with a span of 12 feet 4½ inches, and 6 feet high. This span is $\frac{3}{4}$ of a perch: so that, we can readily calculate the length of the rows and ditches, and estimate the rise or fall of them per perch.



*Explanation of the Figure.* To construct this level, take two strips of dressed heart pine plank, well seasoned, A B, 3 inches wide, ¾ inches thick, and 12 feet 6 inches long. Another strip for a foot brace, 1½ inches wide, ¾ inches thick, and 11 feet long. D.

Also, another for a middle brace, or graduated bar, 2 inches wide, ¾ inches thick, and 6 feet long. C. Lap one end of A & B together, let them into each other, and make them secure with wood screws, so that when fast, the other ends of the strips may be 12 feet 4½ inches apart from outside to outside, and the level when finished be 6 feet high.

Make the foot brace, D, fast to these two strips, one foot from the ground, when the level is standing on its feet.

Make the middle brace, C, fast to the same strips, three feet from the top, and saw off the ends of all, so that the level when completed, will have the dimension and span the distance above mentioned. Paint it, and when dry, graduate it thus, viz: Suspend a plumb line with an ounce lead from the centre of the top, and let the bob extend two inches below the middle brace.

With a spirit-level find a perfect level on a plank, and stand the Rafter-level on it.—Mark where the plumb-line crosses the cross-bar with a pencil, and the places occupied by the feet; change the feet, and put each in the place occupied by the other; mark again with the pencil where the plumb line crosses the bar; if it crosses exactly in the place it crossed before, that is the centre of the level, and the true line, if not, the exact distance half way between the two lines is the level line. To be very exact, the assistance of a spirit level will find it. The true line of the level being found, mark on the top of the bar *o* and make a plain line on the front side of the bar to correspond with *o*. Now put a ½ inch block under the left foot of the level, and mark where the line settles, and ½ on top of the bar; remove the ½ inch block, and put a 1 inch block under that foot, and mark where the line crosses the bar, and 1 on top of the bar; proceed in that manner until it is graduated to 6 inches. Repeat the same process for the right foot, and other side of the line on the bar, and the level will be graduated ready for work.

## SECTION XXI.

Application of the Rafter Level to the Level Culture. The manner of using the level is the same for both methods, with this difference; for the *Level Method* the rows are laid off and plowed on a dead level, whilst for the *Grading Method*, a fall is given to the rows and drains.

It is necessary to be more accurate, and apply the level oftener, for the level method, than for the grading method.

Before going to work, we must determine upon, first, the kind of crop to be cultivated; second, the character of the soil; third, the inclination of the land, whether comparatively level plains, undulating ridges, or hills; and fourth, the methods of horizontaling desired.

To illustrate and explain the different methods, we will select a forty-five acre field, which we call the Gin-house field. Upon examining it, we find a plain, a hill, a ridge, a basin, a pond, and the balance undulating irregular surfaces, and wet plats and ditches. The soil is a gray and dark sandy land on a yellow and red clay subsoil, of medium quality, that has been much abused by bad plowing, and constant cropping. It presents a sufficient variety of soils, and undulations of surface, necessary to explain our subject.—It was horizontalized by me in 1851.

## SECTION XXII.

To Horizontal a Plain by the eye, on the Straight Row Method. We will go to the field with the level well graduated, accompanied by a small boy who carries a bundle of canes, or green sticks, some one foot, and some six feet long. A sensible plowman, with a quick tractable mule, a scooter or rooter plow, and a hill-side mould-board plow, follows:

To try the skill of the plowman, and the temper and spirit of the mule, we select a plain on which the gin-house stands, for operation. We suppose the field to be a stubble field, having been always plowed up and down hill. Having determined upon the direction of the rows, and the points of departure and termination for them, we direct the plowman how to proceed, order him to set his stakes, "be sure you are right, and then go ahead," and lay off four feet rows. As negroes' memories are short, and they are careless, and mules slow and stubborn, we wait to see him started. If he proves to be inefficient, and lays off crooked rows, irregular distances apart, and can do no better, we dismiss him, as not trusty and skilful, and procure another plowman, because, much depends upon his skill for our work to succeed. Should he answer the purpose, we leave him and go hence to

## SECTION XXIII.

Circle the Round Basin. This basin has been partially drained by a ditch passing through it, and emptying into the main ditch, but never succeeded, because the ditch has never been deep enough, and the margins of the basin are too high to admit of deepening it enough, without much labor.

We desire to circle it on a level, so that each row may hold its water, and keep it out of the ditch as much as possible.

We will commence at the ditch, at the east side of the basin, above the margin of the basin, where the land is comparatively level, to lay off a guide-row that may embrace all the sloping land inside of it.

We set the feet of the level on similar ground, and move the forefoot, that is to lead off, until the plummet-line, or spirit bubble, indicates the true level. We stick down a long cane by the side of the plumb for a guide stake. We then move the level and put the hind foot by the side of the stake, and move the forefoot from side to side until the true level is found; we move it again, and put the hind foot exactly in the place the forefoot occupied, and find the level again; we then stick a short cane down under the plumb: we move the level again, and proceed in the same manner, getting the level every time, and sticking a short cane down every third, and a long cane down every sixth span of the level until we surround the basin, and return to the point, or near the place we started from, and we put down a guide stake there. The level may return to the ditch, above or below the first guide-stake. It makes no difference, so the line is run correctly, where it returns to the ditch.

We now lay down the level and walk around and examine the stakes. We will, perhaps, find them standing very irregularly, not in a perfect curved line but a little zig-zag. A skilful horizontaler can detect in a moment, by the eye, almost where the true line of level is; and can move the stakes and re-set them, so that the line will have a more regular curve; it being somewhere between the stakes, inside of some and outside of others. Having arranged the stakes to our fancy, we start at the guide stake, the plowman following, and we walk from stake to stake, the plow moving them as the mule throws them down, and the little boy picking them up, until we arrive at the last guide stake, which is likewise plowed up.

We have now laid off and plowed a circular row, not a perfect circle, and if there be no sudden curves in it, and it suits our fancy, we let it stand, but if we have any doubts about its accuracy we take the level and try it, and if necessary mark the inaccurate places and run them over with the plow.

We now move the plowman on the inside of this guide row, and commence four feet from that row and run a row by it, the plowman carrying a four foot measuring rod with which he occasionally measures the distance between them to see that he keeps the proper distance; and thus he keeps around until he returns to the guide stake. As the ditch is narrow and shallow he passes over it, takes another row, and goes around as before, on the basin side. We take the level and follow him, and test his row to see if it be correct, and if there be any variations of importance from a true level, we stop him and correct it. There are two or three ways of doing this. A very convenient way to keep the row going on around, is to widen the distance between the rows a little at one place, and narrow it at another. Or if this cannot be done, we put in a short row beginning at the ditch and going around until the defect is corrected. We have then to start another row and lay off by that, which the plowman can do, and go around again. Sometimes it becomes necessary to widen or narrow two or three rows, or put in two or three short rows, before the defects are remedied.

In finishing the basin, the rows get shorter and shorter until we have to wind up with a few short straight rows run parallel with the ditch. This concludes the work inside. We now examine the first guide row and the land surrounding it, and if we see that it has not embraced all the sloping land, we run one or more rows on the outside of it, either entirely, or partly around the basin, as the case demands. If the basin has no outlet by a ditch, we could commence to circle it on either side, and go around and stop on returning to the guide stake, nearly opposite to it. We then get on the inside of it, and run the rows by it, as above stated. It is seldom that a guide row on making a circle, returns and meets again. Sometimes, when we start to circle a basin, we commence so far above the margin of the slope, that the level goes off into the field instead of around the basin. In that event, we go lower down on the margin to commence. so that the row may go around the basin. But, if we find it necessary after trying the level method for this basin, to protect the rows by a guard-drain from the water around oozing into them, we can lay off a guard-drain around it, to catch the water and discharge it into the ditch.

If we find upon experience that the level culture is not applicable to the basin, we can try a grading method. This is sometimes the case.

The plowman beds up the land high, in this basin, in the same way that he beds up straight rows of the same distance apart, except that he plows around the basin, and does not stop to turn around at the ditch, until he is obliged to do so from the nature of the rows.

## SECTION XXIV.

Horizontaling a Hill on the Level Method, No. 1. We will now work on the *Peach Tree Hill.** About an acre on the top of this hill is an uneven plain. The hill slopes north, east and south. There is a fence on the south and west, and a ditch on the north and east.

We can commence work almost anywhere on the side or top of the hill. For convenience of plowing, we will begin on the top not far from the angle of the fences, and lay off a level row from fence to fence. This is done in the same manner that we did for the basin, moving the level as then, and staking the row for a guide row. When done, the plowman begins and plows it out. We test it, and find it correct and nearly straight.—We put him to laying off four feet rows by it next to the fence side. They become nearly straight before he finishes them. Whilst he is at work there, we step down thirty paces to the brow of the hill, and commence at the west fence and lay off another guide row, which makes a curve as it goes around to the south fence. We examine our stakes, reset them, and the plowman plows it out.—We test it with the level, and correct the errors with the plow.

The plowman after finishing the first set of rows, has gone on the other side of his guide row, and is laying off by it. We watch and try his work with the level, and see that he keeps his distance. We find directly, that the south end of his rows terminate at the fence, and the north end, at the second guide row just laid off; and unless his rows are on a level, they will pour the water into this guide row, or by the side of the fence. When he finishes this work he goes below the second guide row, and lays off by that, and we go twenty steps below it and lay off a third guide row. To do this we find two gullies to cross, made on the side of a fence that has been removed.† They have a ridge between them on which the fence stood. We call the hoe hands, not far off, shrubbing a ditch bank,‡ and send for a plowman with a turning plow, who is plowing in the first set of straight rows laid off by the eye; before he arrives, the hoe hands have nearly filled the gully with shrubs, pieces of rails, tufts of grass and like substances, and have them ready for the dirt. The plowman goes up and down the ridge, and turns the dirt on and towards the gullies, and the hoes drag it on and fill up the gully with soil, tramping it down hard at the same time. This job done we dismiss them for the present. Unless there is a good reason to commence laying off this third guide row at the fence, we commence it at the head, or beginning of the gullies, and lay off the row on one side and then return to the starting place, and lay off on the other side of it. To do this work well, we first span the gullies, and get the level to start with. We then lay off from the guide stake. We left the plowman on the lower side of the second guide-row. When the plowman has laid off five or six rows by the second guide row, he lays off this third guide row. As he crosses the gullies he turns up the rows a little and crosses in a curve, or else after the dirt settles in the gulley, the water might accumulate in it, and make a break. This row is examined for correction and corrected. The plowman now lays off rows on the upper side of this guide row until his work meets. If there be any short rows they are between the two last guide-rows.

We go below thirty paces, and lay off a fourth guide-row. This will be sufficient for this hill-side. The plowman lays it off, plows a few rows above it, and then a few rows below the third guide-row, to throw the short rows between the two sets of rows. The balance of the rows are laid off by the last guide-row. They get shorter and terminate between the angle of the ditches*.

---

*See Fig. 1, Peach Tree Hill; page 176.

†Note.—Gullies should not be allowed by the side of fences. The fences, if possible, should be placed on level land, even if they are crooked.—So should all plantation roads. All gullies should be stopped and filled up several days before the land is horizontalized, in order that they may receive a rain or two, and settle the dirt in them.

‡Ditch banks and fence corners should be shrubbed, and all sprouts on the field grubbed up before the horizontaler goes to work, so that his work be not delayed.

*See Fig. 1, Peach Tree Hill.

Note.—This hill was laid off by this method in 1851, and the gullies stopped in two years. As the rows next to the main ditch hold water too long in the Spring of the year, some of them have been altered so as to give a little fall to them, to empty the water at the fence, and then into the ditch. The hill-side was plowed as deep as one good mule could do it, and it has improved, and produces much better than it did the first year with the same management.

## SECTION XXV.

Horizontaling this Hill by the 2nd Level Method, with Guard-drains. If we desired, we could make two guard-drains on this hill-side. One where the second guide-row is, at the brow of the hill, and the other where the fourth guide-row is, at the head of the gullies. We select these places, because, the rows are more likely to break at the brow of the hill, and because, the gullies have made breaks already. The first guard-drain would have less land to protect than the second, and its dimensions can be less than the second. We would make it ten inches deep, twelve inches wide, with a fall of one inch to the span of the level. The second drain would be twelve inches deep, eighteen inches wide, and varying from one to three inches fall to the span of the level. To lay off the first row we would commence at the south fence, at a certain place we desire to discharge the water. We might pass it under the fence into my neighbors field, but as he has no corresponding drain, we let it go down the fence on our side.

We lay it off just as we do a circular row, except we give an inch fall, every span of the level, and turn up the end at the west fence, to catch any water that might descend by the side of the fence.

To lay off the second drain, we commence at the head of the gullies, because if we commence at the fence, the drain might not pass them at that point, and to stop all breaks, gullies and washes, we must remove the cause first, and the cause is usually above the commencement, and sometimes some distance to one side of the break. It requires a skillful eye to detect it, sometimes. We commence at the gullies and give two inches fall, and proceed to the south fence, and at the fence we give three inches the last span, to prevent the mouth of the drain from choking with trash and sand. We return to the gulley, and run the other way to the west fence, and the first span we give one and a half inches fall towards the south fence, then one inch the next span, and continue that fall to the end, and turn it up two inches at the fence. We have a drain row with a fall of from one inch at the west fence to two, and lastly, three inches fall at the other end. The gulley by the fence takes the water into the ditch below.

The drains having been laid off and staked so as to know them, we lay the rows off on a level as above stated for No. 1. Should they break, the guard-drains will arrest the water, and remove it when desired. This will suffice to explain this method.

## SECTION XXVI.

Horizontaling this Hill by the Grading Method, No. 1. Suppose we desired to lay off this hill with a fall to the rows, without the aid of drains or hill-side ditches, we would commence as we did for the level method, and lay off the top of the hill on a level, as we find it inconvenient to discharge the water up there.

Then we would lay off the first guide row at the brow of the hill, as was done for the level method, but give a fall of one inch to the span of the level, towards the south fence. We would lay off a second guide row, where the third guide-row is for the level method at the head of the gullies, and give the same fall as the one above. One more guide-row would be sufficient. In plowing out the rows, the plowman lays off a few rows below the first, and then a few above the second guide-rows, so that the short rows may be midway between them, if any. Now if the short rows were to empty the water into one of the long rows, it would cause that row to wash into a gulley. So we plow them on a level. The same disaster would happen, if the short rows were to terminate with a fall with a guide row. To avoid that mischief, we lay off long rows by the guide-rows, so as to throw the short rows between the long rows as above mentioned.

The balance of the land can be plowed by the third guide-row. But, we find that they will terminate at the ditch, and there is no provision made for the exit of the water.—We have either to lay off a drain by the side of the ditch, or lay off two rows next to the ditch, and parallel to it, and make a drain of the water furrow of the second row next to the field. This is the best plan if the land adjoining the ditch is higher than the adjoining land.

The graded rows then empty into that furrow, and it is conveyed to the gulley by the side of the fence, and from thence into the main ditch.

But should the ditch have too much fall to admit of the above plan, we should have to adopt some other plan to receive the water, and to discharge it into the ditch. We should have to plow all the rows in the angle of the ditches on a level, or cut a guard-drain from the point of intersection of the ditch and south fence, to the north ditch, and give two inches fall to it, and empty the rows in the angle of the ditches into it.

## SECTION XXVII.

Horizontaling this Hill by the 2nd Grading Method. We have to lay off the drains, and then the rows with the same fall as that of the drains. Two drains in the same places as those for the level culture would answer. We would discharge the water at the same fence, with a grade from one to two inches fall, twelve inches deep, and fifteen inches wide. The rows are laid off by the drains as above stated. The first rows above and below the drains, should be five feet distant to give room for the channel and bank of the drains. All short rows should be between the long ones, and plowed on a level. If they terminated into a long one they would wash it, and if they terminated in the drain below, they would fill it up with sand.

## SECTION XXVIII.

Horizontaling by the 3d Grading method. The rows by this method must discharge the water into the ditches. We cannot explain it so well here, unless we suppose the main ditches, and the gulley by the side of the fence, to act as substitutes for the hill-side ditches. The drains are laid off as by the preceding method, but with more fall to convey the water off more speedily. We then run the rows with a fall of one and a half inches into the ditches. Many of them will terminate at the ditches, and many elsewhere. The liability to wash the land, and the trouble of discharging the water, would make it objectionable on this hill-side, but the method might answer a better purpose in other places.

## SECTION XXIX.

Horizontaling by the 4th Method. The straight row method could be applied here, and with the protection of hill-side ditches with three inches fall to them, the land would not sustain so much damage as it has done by the same method without the ditches.

Your hill-side ditches would do for this hill-side, with a fall of from three to five inches, eighteen inches deep, and twenty-four wide. They must be capacious to receive, and retain the sand and water. After they are laid off and staked, the plowman sets his stakes and plows up and down hill. In cultivating, the plowman has to raise his plow over the banks of the ditches as he passes them. This is troublesome, and he is likely to plow down the banks. This method would do much mischief to this hill in a few years, and cause much labor to keep the drains clean, and the banks up. It would be very objectionable to this kind of land.

## SECTION XXX.

Laying off Guard-drains and Hill-side Ditches with the Rafter-Level. A skillful horizontaler can lay off these drains very well with an Engineer's, and other levels of simple construction, but as we write more especially for the instruction of new beginners of the art, we shall use the rafter-level. We will select the Triangular Ridge, in the same field, for operations. It lies north and south, near two hundred yards long, the apex of the triangle being east, and the base west, about one hundred and fifty yards wide. The ridge inclines south, east and west, and the water naturally flows south, south-east, and south-west. It is bounded on the east by a fence, on the west by a ditch, on the north by a ditch, and on the south by a flat and drain.

We take the level and go on the ridge where the greatest slope south begins, and the greatest expansion east and west takes place; more properly, where the ridge begins to break up and spread out into the flat, south, west and east. We set the level across the backbone of the ridge, and find the exact level, and stick a stake down by the side of the plumb-line, called the medium stake.—We now go east, and place the hind-foot by the side of the stake, and move the fore-foot until the plumb-line settles at the half inch mark of fall on the graduated bar; we then move the level and put the hind-foot exactly where the fore-foot stood, and move the fore-foot until the plumb-line settles at three quarters of an inch fall on the bar; we move it again, and repeat the same movements until we get to two and a half inches fall, and continue that fall to the last span of the level, and give it three inches fall; we finally turn down the level to the corner of the fence to six inches fall, so as to give the drain a sufficient curve to catch the water descending in a gulley by the side of the fence, and convey it out without breaking the bank of the ditch. We return then to the medium stake, and proceed exactly in the same way for this part of the drain, as we did for the preceding part, until we get to the wet flat bordering the ditch, and from thence to the ditch we give three inches fall, and turn down the line so that it may enter the ditch at an acute angle, to keep it from being choked at its mouth.

In laying off this line we stick a long cane every sixth, and a short one at every third span of the level. We now lay down the level and examine the line. We find the stakes standing irregularly, some out, and some inside of the line, rather zig-zag. We re-set them by the eye, and order the plowman to follow us with the scooter plow.—We walk from stake to stake, and just ahead of the mule, (who will soon learn to follow us,) and leave them for him to knock down, and the little boy to pick up. When we reach the end at the ditch or fence, the plowman waits until we examine his furrow with the level, to see if it is correct; if there be any deviations from a correct and regular fall, we mark the places and direct the plowman to run them over. When it is done right, he takes the hill-side plow and retraces the line, throwing the furrow down hill, and thus continues, throwing two or three more furrows in the same manner, and the hoe hands drag out the dirt, and form an embankment, making it higher at the fence and ditch, as the danger of its breaking is at those places. The plowman runs two or more furrows in the drain from each end up to the one inch grade, and stops at that point as it is deep enough there.

When the ditch is finished, it will vary in depth from the medium stake to the ditch, and to the fence, from six to eighteen inches deep, and from eighteen to twenty-four inches wide.*

As the wet flat bordering the ditch the whole length of the Ridge needs draining, and as the land has been cross plowed, and cut into ruts by the plow and water, we conclude to

## SECTION XXXI.

Horizontal it with the Grading Method No. 3, with a fall to the rows of one inch to the dry land, and three inches to the flat.

We will commence and lay off a guide-row where the wet and dry land joins, at the hill-side ditch, and run north to the main ditch. This row is nearly straight. The plowman lays off all the rows by it to the main ditch, in the wet land with the same fall, four feet apart. We go to the medium stake, and lay off a row north, on the backbone of the ridge, and find it varies but little from a straight line, and terminates at the north angle of the ridge at the ditch, and give it a fall from that point to the hill-side ditch of one inch to the span of the level. The plowman now lays off the rows on each side of this row by it, to the first guide-row, and to the fence.—We see that it is done correctly, and put in a short row occasionally, to keep the correct and regular grade.

In cultivating this ridge, we have had to make a few water furrows across the rows in the wet flat, with the plow, to drain it quicker during heavy showers. This is all the trouble we have had with this ridge since it was horizontalized.

## SECTION XXXII.

Guard-drains. Below this hill-side ditch we have made three guard-drains, two on the east side of the ridge, and one on the west. The first one about fifty yards from the ditch, and the second one thirty yards below that one, both nearly parallel to the ditch. The first one about half the length of the ditch, and the second one not quite so long as the first; both have a grade of from one to three inches, twelve inches deep at the outlet, six inches deep at the heads, and fourteen inches wide.

The one on the west side of the ridge is in the shape of a capital E, and the lower end of it is a double drain, receiving and discharging the water on both sides of it, into the main ditch.

The two first are laid off in the same manner, commencing at the fence and proceeding up into the field.

The third drain, we commence at the hill-side ditch, into which the drain discharges at the north end, and curves up and down, and then up and down again to the main ditch south, and just before it reaches the main ditch it divides into two, separated merely by the bank. The middle of the E connects with a drain that leads to the ditch, making three outlets for this drain, one into the hill-side ditch, and two into the main ditch.

We need not describe the laying off and constructing of guard-drains, as it is the same as for the hill-side ditches.

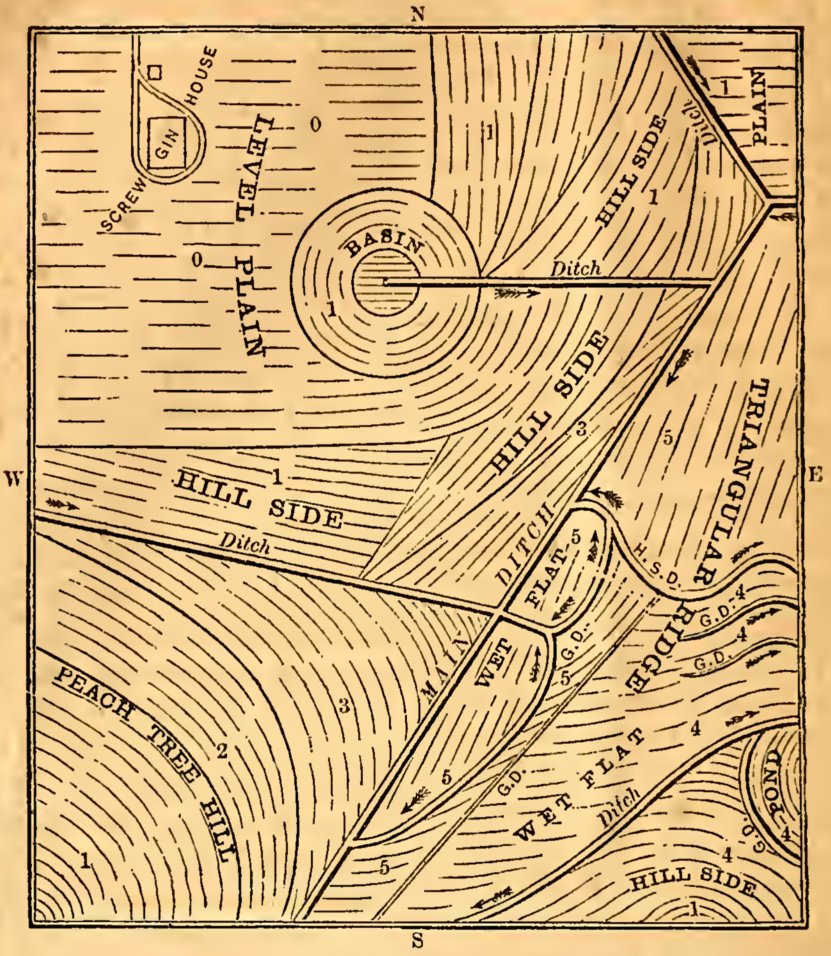
We might write many more pages on this subject, to illustrate the minutiæ of this beautiful art, but as the *Essay* is already much longer than we desire, we refrain, but will illustrate it by a couple of *figures*, for the examination, and study of those who take sufficient interest in the art; and hope to make it sufficiently intelligible for the understanding of my readers.

---

*See Fig. 1, Hill Side Ditch, Triangular Ridge.

[*See Figures on next page.*]

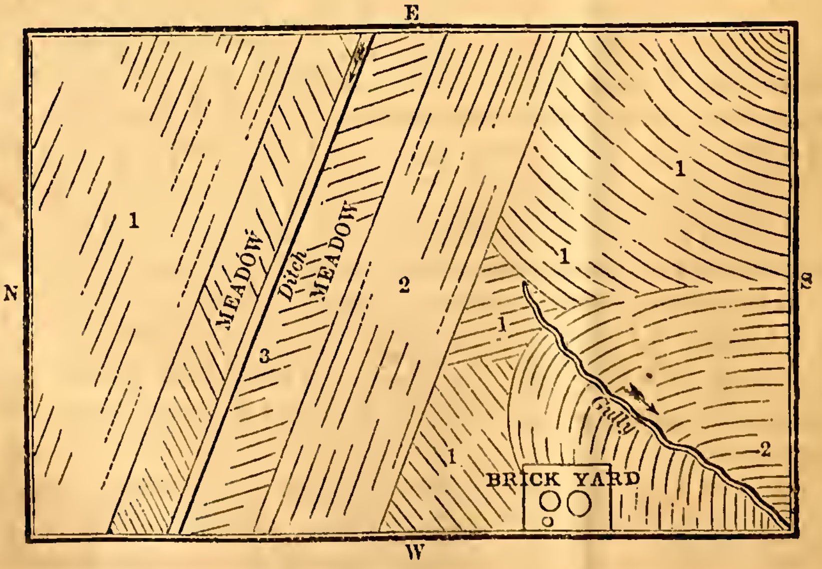
Fig. 1.



*Gin House Field*, 45 *Acres.*

0. Straight rows by the eye. 1. Level Method, No. 1. 2. Level Method, No. 2. 3. Grading Method, No. 1. 4. Grading Method, No. 2. 5. Grading Method, No. 3. 4. Not illustrated.

Fig. 2.



*Brick Yard Field*, 10 *Acres.*

1. Level Method, No. 1. 2. Grading Method, No. 1. 3. Grading Method, No. 3. The gully was stopped in two years.

*For the N. C. Planter.*

MESSRS. EDITORS: I have often thought of complying with your request made to your subscribers, viz: that they would all contribute something to the pages of the Planter, but distrustful of my ability either to interest or instruct the readers of the Planter, I have delayed until now.—My zeal for the interest of the Planter has had full scope for its exercise, in endeavoring to extend its circulation. Though I have obtained but *three* as yet, those *very three* were subscribers to the Southern Cultivator.

I cannot but congratulate you upon the successful and able manner in which you have edited the first four No's., and also the citizens of North Carolina upon the establishment of an able and instructive Agricultural journal among them. To every one of whom I would say, we have a journal worthy of our generous support. Let us give it, *and give it now.* Don't think about it, and talk about it, and let it die like its predecessors have done.

Let it not be said of us that we were first in declaring our independence from England, but the last from Agricultural ignorance and fogyism.—Though its exterior* may not, yet its interior will fully compare with the best Southern journals. Admitting for the sake of argument, (which I by no means do admit,) that the Planter is not equal to other Southern journals, what North Carolinian would refuse the small sum of one dollar, to sustain a journal which has for its object the elevation and prosperity of North Carolina?

Yours truly,
MECKLENBURG.

---

*This was written before the North Carolina Planter had the present neat cover to it.—[PUB.

---

From the Washington Dispatch.

## Diseases of Wheat.

MR. GRANGER: The wheat crop of this and other sections of our country, from which I have heard, have become strangely affected with rust upon the *blades*, while the stalk, in many cases, show no symptoms of the disease.

This, though novel, is, I believe, uniformly the case, not only with the red, but also with the white varieties of wheat. The latter, though subject to the smut, very rarely takes the rust, while the former is generally subject to this disease. The difference, I think, arises from the early maturity of the white varieties. They ripen ten or twelve days earlier than the red, and escape the warm showers of June, which, by forcing the growth of the latter kind, burst the sheath or outside covering, and when this occurs, the rust will surely follow.—The extent of injury to the crop, will then depend upon the time required for its maturity. If it have many days to run, the disease will get the better of the race, and will either destroy the crop entirely, or abstract so much of its nutriment as to make the grain exceedingly light.

After experimenting some twenty or more years with different varieties of wheat, I came to the conclusion, that the earlier the maturity of the wheat, the less liable it was to disease. But I have never yet found an early kind that was adapted to our cold swamp soils. They are not so hardy as the red varieties, and while the latter will withstand the freezes and thaws of our changeable climate, the former is liable to be frozen out and killed. It became necessary, therefore, that I should use only the most hardy kinds, and these being late and liable to the rust, my great object was to hasten the maturity of my crops, by giving increased heat as well as fertility to my soil. The first I accomplished by thoroughly ditching my land, and the latter by the use of Mapes' phosphate of lime. My experiments with this fertilizer have now run through the space of four years, and the crops which I have reaped from it, have not been in the slightest degree injured by the rust.

To satisfy myself of the value of this manure, I have generally omitted to apply it to a few rows, and the wheat upon these rows, though not so much injured by the rust, as was the case before I thoroughly ditched the land, was nevertheless injured to some extent, and was always a week or ten days later in maturing than the rest of the field; nor did the disease appear, until about the time of reaping the fertilized part of the field. This was conclusive evidence to my mind, that the escape of this part of the field from the disease was entirely owing to its early maturity.

The difference of product is 9 to 12 bushels per acre; that is, 200 lbs. of Mapes' phosphate of lime, will give a product on my land of 15 to 18 bushels per acre, weighing 58 to 61 lbs.—The land without the aid of this fertilizer, will produce 6 to 7 bushels, weighing 52 to 55 lbs., when it escapes the rust. Succeeding crops also derive much benefit from the remains of this manure. The wheat crops of our county, the present year, will, I think, be the lightest that have been made in many years, and the injury has no doubt been caused by the heavy rains and sudden changes of weather, running into extreme heat and cold, giving a premature growth a day or two, and then blighting the tender plant. But let none of our farmers be discouraged in the culture of wheat, for every branch of industry has its mishaps and disasters. Wheat and cotton on our upland, and wheat and corn on our cold swamp land, will be found the most profitable, as a general thing. But I advise our farmers not to cultivate poor land. Expend your surplus means for fertilizers.—If you have no spare cash, sell half your land to raise it; or if need be, go in debt for fertilizers— and this is the only thing a farmer should go in debt for. By doing so, you will double your gains, and save half your labor.

To those who may wish to try Mapes' Phosphate of Lime, I would recommend the Nitrogenized. It comes a little higher than his other varieties, but is the best for cold soils. Messrs. Fowle & Son, of Washington, N. C., are his agents. X.

Beaufort co., May 4, 1858.

---

*From the S. C. Farmer & Planter.*

## Advantages of Deep Plowing.

MAJ. SEABORN—*My Dear Sir:*—As I have the science of agriculture and your individual prosperity at heart, I cannot more profitably, I suppose, employ your time and patience, or illustrate the decided advantages of deep plowing, better, than give you the result of a beautiful experiment of the Hon. N. W. Woodfin of North Carolina. Mr. Woodfin is a profound lawyer and a judicious husbandman of the "Old North State." I proceed forthwith to give you his admirable suggestions, hoping they may materially aid you. In a letter to myself, the Hon. gentleman says: "I raised in 1855, on 7¾ acres of land, 855 bushels of corn, and on 20 acres, including this, 1800 bushels, or 90 bushels to the acre, being the best parts of a large field, not planted with a view of measuring. The best grew on upland, a stiff, red clay, near the base of the hill, and extending into a reclaimed maple swamp, which had been 10 years in timothy, without manure. The ridge land had been worn out before I purchased it, in 1838. It had been manured and cropped in corn, wheat, oats and clover, on a five years shift; had, however, been for four years in clover, and generally fed off to stock. I had enclosed several acres of it to fatten my hogs; in two years about 80 were put on it, and the corn cut and hauled in while green, and leaves scattered over the ground abundantly, so as to be rooted in by the stock. It had been in corn the last year, '54—after being subsoiled from 11 to 12 inches, was top-dressed in February, '55, with *barn* yard manure—I suppose not more than 30 two-horse loads per acre, and turned in pretty deeply. The low-ground was well drained, and had been in corn the year previous, '54, also. It *was* subsoiled to about the same depth, with a little manure. On the best of it none was put—a portion was exhausted sandy land, on the river's edge. That was well top dressed with swamp muck, and about thirty loads of barn yard manure, and plowed shallow. The ground was well stirred before planting, a single furrow run on a level surface, and the corn dropped in it and covered with a plow. I drill, certainly.—Placed these rows three feet apart, except on the sandy land, where they were 3½, planted one grain of medium size, at the distance of about 8 inches in the strongest soil, and ranging it from that to 12 inches, according to the strength of the land. Soon after the corn is up, the plow is run near it, throwing the earth from the corn, and replanting. It is then cultivated in the usual way, plowing, however, as shallow as possible, and at farthest, once in two weeks. This was worked about every 12 days, putting a little earth to the corn. I should have said that the roller was passed over the sandy part at planting. The largest corn is not the best for us, it requires too much distance."

I have, Mr. Editor, been thus particular, in order that the farmers and planters—the men who feed and clothe mankind—may know the benefits, marked as they are, of disintegrating the soil.

The subsoil plow is the grand eureka of the planter. It is that which is revolutionizing this country and making fresh and vigorous our apparently wornout soils. Wonderous changes has it already wrought. It is to planting, what machinery is to manufacturing. The great renovator and beautifier of all kinds and every variety of soils. I consider it the very key to unlock the hidden treasures of our earth. My brother agriculturists, use this key—plow deeply.

Truly yours,
W. S. Dogan.
Sylvania, March 23d, 1858.

## Raising Hogs.

Oxford, N. C., 1858.

Mr. Editor: As I have nothing to do and so much time to spare, I thought I would drop you a hint about hogs. The raising of pork is no small item to every good farmer. In the South without a plenty of this important article no good master can feel contented; and since my return from the South and West where I heard so much talk about the supply from the West being cut off by that dreadful scourge known as the hog cholera, feel it a duty to my brother farmers to give them my experience in raising hogs for the last twelve years.

The first year that I set out on my

own hook I was well cared for by my father, who gave me a plenty of stock of all kinds to commence with. I was, and always have been, partial to hog raising, so I gave my hogs all the care I could. I paid much attention to the breed, and what few I raised I thought of a superior kind, being a cross of the Snapdragon, Berkshire, and Irish grazier.

Well, Mr. Editor, with this fine breed of hogs, (as they have since proved to be,) I could scarcely raise pork enough for the first three years of my farming life. My hogs would sicken and die, do what I would, with some disease or other. On one occasion while examining my hogs in a pine field, I noticed the best and fattest of them were employed in rooting up pine roots and eating them greedily, whilst those in lower plight cared little or nothing for them, and contented themselves with grass. I observed this several times, and came to this conclusion, that it could not be for the sustenance that the fattest and best of my hogs were devouring these roots so greedily ; if it was, why did not the poor ones seem as anxious to get the roots ? And, again, why was it that whenever I lost a hog, or shoat, it was one in fine condition ?

I am now fully satisfied that my conclusion was correct ; that it was not for the sustenance that they eat the root, but that it is a hog medicine, and they use it, and know it by instinct as the dog resorts to grass for all of his ailments. Being satisfied for what purpose the pine root was used by the hog, I determined to try this remedy in a more concentrated form, so I got the spirits of turpentine, knowing that was a strong anthelmintic and diruretic, commenced giving my hogs a common tea spoonful to evry hog that was weaned from the mother. They soon gave strong indications of health ; and to show on what my confidence is built, since 1847 I have not lost a hog of any description or kind, that I know of, from disease of any kind.

It may be that the spirits of turpentine may relieve the hog-cholera It can be used in a simple manner just take a given quantity of shell corn or wheat, put it in a tub and measur a tea spoonful per head to all of you hogs. Be careful to mix the turpentine well in the vessel, and then scatter it over the ground so that each on gets his share.—*Southern Planter*.

## Tobacco.

This is a most important season i the growing of this valuable crop.— A cotemporary in New York, advise his readers to set out their plant about the last of March. This ma do for the latitude of New York—a least we will not argue the point—bu in Maryland we rarely begin the operation before the 20th of May, an the planter who can get a good stan of his whole crop by the 20th of Jun considers himself so far successful.

PREPARATION OF THE GROUND.— Some planters have adopted a pra tice of postponing the ploughing their tobacco ground until after cor planting. Where there is scarcity pasture, the practice furnishes gr zing ground until the clover field ca be turned upon, and planting on th first furrow, that is with a sing ploughing, saves labor. The practi is a bad one, except on very lig soils. In the first place, the tram ing of the stock in the spring compac the ground, and should the seas prove a dry one, it will become hard, as to make it impossible to g it in the very nice order, which is a solutely required for setting the young plants in. Under favorable circumstances this will be a difficult matter; and when it is considered how much depends, in the tobacco more than any other field crop, upon this careful working of the surface soil; the difficulty of getting a stand on badly prepared land; the loss of labor in replanting, and the much greater loss in the irregularity of the crop, no consideration of convenience or a supposed saving of labor should be allowed to interfere with it. The ground should be well ploughed immediately after the breaking of winter, and harrowed to close the seams and prevent the grass from growing through them. This having been done, the second ploughing will be given in May and June, in immediate anticipation of planting. This ploughing should be shallow, not disturbing the sod previously turned down, and will form a little moist bed, which will leave little labor for the hoes, and in which with any degree of care in planting, the plants will hardly fail to live and thrive.

MANURES.—The manures should be applied and mixed with the surface soil by the second ploughing, if barnyard or stable manures are used.—We would not recommend the use of manure having with it much coarse undecomposed litter; it keeps the ground too spongy and porous for the good of the young plants.

The best of the bought manures for Tobacco is an equal mixture of Peruvian and Phosphatic guanoes; many planters use Peruvian alone. Of the mixture the least quantity to be used is three hundred pounds per acre, and two hundred of Peruvian if used alone. Some use in more liberal quantities, and think the application sufficient for the Tobacco and the wheat crop following. These or other portable manures may be applied just before the ground is laid off and crossed for making the hills. A great advantage in the use of these manures is that by their help, instead of appropriating only certain of the best portions of the farm to the tobacco crop, the poorest may be used for the purpose.

Those who plant in drills open a furrow and strew the guano in the furrow, throwing over it a ridge with a furrow from each side, on which they plant. These ridges are three and a half feet apart, and the distance between the plants on the ridge eighteen inches or two feet. Again, those who plant in hills, not unfrequently drop the guano in the centre of the check, drawing the earth over it for the hill. A small spoonful is enough for each hill. Where Peruvian guano alone is used, we recommend that an equal amount of Plaister be mixed with it.

PLANT BEDS.—These should receive constant attention. Keep the grass out of them by careful picking; after the first drawings for planting, pick them again. To ensure there holding on through the season with a supply of plants, it is absolutely essential to keep them clear of grass. They should have frequent top-dressings too, of fine compost, or of guano well mixed with fine rich mould. The best security against the fly, is to make the plants grow so vigorously that they get too coarse for their feeding.

In making your first planting, do not draw the bed too closely. Aim rather to relieve them of such large plants as crowd the beds, than to make a large planting very early.—Too close drawing is very injurious to the beds, and setting out small plants very unprofitable labour.

*From the Cotton Planter & Soil.*

## Plantation Work.

The Crops.—Corn and cotton is now all planted, and where the circumstances of planting with the conditions of soil and seasons have been favorable, the young plants are up and growing. The planter is now called upon in the use of a new set of plantation tools or implements, to operate for the prosperous and continued growth of his crops, by the removal first of all grass and wild weeds, which, by out-feeding, the young plants of course grow up and monopolize the soil. Nevertheless, however important it be, to remove and kill the grass and weeds, it is also necessary to stir and pulverize the surface soil, that the warm rays of the sun and the atmosphere may have free access to the roots of the plant, thereby securing the proper warmth of soil, and with it the necessary chemical changes in its fertility, in which condition of soil and fertility the feeders or rootlets are supplied with their proper food, and the health and rapid growth of the plant promoted.

While there is no one rule or mode of operation that will apply equally well in all localities, there is, nevertheless, *one general principle* that must be observed throughout the entire operation of cultivating the growing crop, in order to secure the sure and greatest production, under the circumstances of seasons, &c.: That universal principle is, to avoid as much as possible, in the cultivation of the crop, the *cutting or wounding* the roots of the growing corn or cotton—producing at the same time the most perfect pulverization of the surface soil. To every man admitting the principle, the indications are plain and obvious, and will suggest at once the proper implements with which to effect that object most successfully.

Corn.—We have before remarked, in regard to working corn the first time, that when the land is very hard and compact from imperfect preparation, subsequent hard rain or other causes, the first plowing may be done with scooter plows, close, thoroughly and deep, while the plant is yet young, and before the lateral roots have spread out from the immediate vicinity of the stalk. This can be done without injury to the land or teams, as the sun has not yet become oppressively warm; it is also a valuable means of perfecting and deepening the pulverization of the soil, commenced in the preparation of the land for planting. This work properly done, not only destroys all grass and weeds that may be at the time standing with the young corn, but it leaves the soil once more loosened up deeply, in a light and friable condition, into which the young and growing corn, thinned out to a stand, sends out its roots in all directions after its proper nourishment in the soil.

Now, can any reflecting planter or manager believe, for a moment, that he can again, after this, when his corn is knee high or more, drive a plow into this soil, every square inch of which is permeated by the rootlets of the growing corn, without cutting loose and destroying these roots, and thereby preventing that supply of nourishment necessary to the prosperous growth of the crop? We think not. It is not necessary under any circumstances. Another plowing, under such circumstances, all other things equal, will not only cut short the production from ten to fifteen per cent. in quantity per acre, but it will effect the real value of the produce to the extent of at least five pounds weight less per bushel.

Cotton.—Your cotton will next require your attention. You have taken a great deal of pains to bed up the land for the reception of the seed. This you may have done for your corn also, and in low, dampish land, it is quite necessary, but in the cultivation of the cotton plant, you must proceed upon different principles entirely. You may make cotton, and frequently will make fine crops, on this new, rich, maiden soil of ours, by working the plant just as you do corn. It, is, however, or should be, at least, the object of every planter to operate in all his plantation economy to the very best advantage. The cotton plant differs very materially in its natural history, habits and growth from the cereals, of which family the corn plant stands prominent. The cotton plant, like the noble oak of your forest, comparatively requires a rich, firm and compact bed, and when this bed is once thrown up in early spring, as it should always be, it is wasteful economy for any purpose to plow it down. If you desire your cotton to set its young bolls and bear full of fruit, preserve scrupulously in all your subsequent work, after the plant is up, the bed *unbroken. Mark this!* The first work then is to scrape, instead of *bar down* your beds. The Mississippi scraper is said to be a fine implement for this work—we have not tried one. We rely mainly on the hoe, though we have used for the last few years a very good instrument made by Ruggles, Nourse and Mason, of Boston, which does the work very well, and preserves the bed unbroken. The prolific source of all the difficulty in making cotton, is this constantly plowing down and bedding up your cotton ridges after the cotton plant has commenced growing. And we again reiterate the fact that though the boll-worm may destroy his thousands or millions if you please, the plowshare destroys its tens of millions! In all your work then, pulverize the surface and preserve, at the peril of great loss, your beds unbroken.

Peas.—In the first of this month, (June) peas should be planted. The best and surest plan for a crop on rich or improving land, is to sow them broadcast, at the rate of a half bushel per acre, and cover them by running twice in the row with a harrow—we use invariably a side harrow for this purpose. Do not neglect this crop under the apprehension that "peas will kill hogs." Our opinion is, that many more die for the want of them.

Potatoes.—Your potatoe crop will now require your attention, nor should you neglect its importance. As we have before frequently stated, the potato crop in the plantation States as a general thing is greatly underrated, and as a consequence, too much neglected. An acre of land containing sufficient soluble fertility to produce 25 to 30 bushels of corn, will, when properly prepared, produce a larger amount of good wholesome animal food, in sweet potatoes, than in any other crop we have tested. Potatoes are equally good for man and beast; and they are good and healthful prepared in any and every way. They are now selling freely in our market here every day and have been for months past, at from 80c to $1 per bushel.—This is one of the vegetables that is good in all its parts—roots and vines. The vines in the green state are fine food for pigs and milch cows, and late in the fall before frost may be gathered and cured into the finest kind of hay, which is equally good for horses and cattle.

Stock.—Your attention to the welfare of your stock should not be relaxed, because the warm weather of summer is at hand and the grass growing. Give them daily attention, see that all are healthy, and see that they have salt at proper intervals and other necessary attentions.

## Report on the Pea Culture.

We give below some just remarks on the Pea Culture from a report read before the Union District Agricultural Society of South Carolina, taken from "The Farmer and Planter." We regret to find that the Pea Culture is not pursued as it should be, even where its value is known and acknowledged.

The writer makes a proper distinction between a fertilizer and an ameliorator. He says the pea is only an ameliorator, as "if returned to the soil it gives back only what it received from it, with the addition of the carbonic acid and the amonia." But let it be borne in mind how important these additions are which he seems to throw in by the way as of little importance. How large a portion of every plant does carbonic acid supply. And the money value of amonia is estimated by the enormous sums we are paying continually for Peruvian Guano It is a very important office of these broad leaved plants to gather these floating elements from the atmosphere and to put them in combination with potash, soda, lime, phosphoric acid and other inorganic elements, which they have brought up through their tap roots perhaps from the sub-soil. All returned to the soil together they form that humus which is the very bread of the more valuable plants. It is their ready prepared food upon which they feed and fatten without the necessity of working their lives out in the search for it:

"Notwithstanding the acknowledged importance of the pea crop among us, it receives very little attention. It is generally planted at the 2d or 3d plowing, with the corn, when it can receive very little work, and cannot do much in the way of growing until the corn is made and the fodder taken off. To be made profitable as a crop, it should be planted and cultivated by itself; and with very little care in this way, it can be made to pay on almost any soil. It is not reasonable to expect a fine yield of peas and corn from the same field at the same time. If they both make their fruit at the same time, they must interfere with each, and tax the soil heavily—for they derive their support from the same source, and contain elements near akin to each other.

It has been argued by many persons that the pea was a fertilizer—that it was the clover of the South; and the shortest and most economical means by which our lands could be restored to their original fertility, would be by the pea. This is claiming too much for it. By fertilization, we mean any process by which we restore to the soil those constituents of plants which have been taken from the soil by repeated cropping.

We are taught by analysis, that the pea contains potash, soda, lime, magnesia, phos. acid, sulp. acid, iron—these are all mineral properties, and must be derived from the soil, and if taken from the land, must exhaust it. If returned to the soil, it only gives back what it received from it, with the addition of the carb. acid and amonia which it received from the atmosphere. From this it would appear that the pea cannot be relied upon as a fertilizer.

We have no doubt, however, of its value as an ameliorator. By amelioration, we mean any course by which the capability of a soil to yield crops may be improved without the application of manure— such as rest, rotation and turning under green crops. A soil, by one course of treatment, may be made to yield the proper food for plants readily and abundantly, while by another it may be made to lock up its treasures in a most miserable manner. North of us, clover is the great ameliorator—but how is it used? The soil is well prepared, deeply plowed, harrowed and rolled,—wheat sown, guano or other manure added—clover sown on the wheat.—When the wheat is harvested, repeated doses of Plaster Paris are given to the clover, to force it into luxuriance—after three or four years, wheat sown, and a heavy clover crop turned under with it, &c.

Now, if our lands were covered with pea vines, repeated applications of Plaster Paris, and the vines turned under, the improvements would be manifest. The pea has a long tap root, which sinking deep into the soil, would bring nearer to the surface the food of plants, while the broad leaf of the vine would protect by its shade the soil, and store up carbon and nitrogen derived from the atmosphere and soil, for the future use of plants.

The pea can never equal the clover, because it does not answer the purpose of clover in winter; but it is our best substitute, and we have no doubt but soils may be kept in better heart, and protected against deterioration for a long time, by rest and turning under the peas as a manure, more economically than any other process."

## Hungarian Grass Seed.

This grass is, without doubt, the article so much needed in our section to enable us to compete with the West in raising our own cows, beef, mutton, mules &c. The last Patent Office Report speaks of it as having been first imported by the Patent Office in 1854, and known as the "Hungarian Grass," and goes on to say it is luxuriant in its growth, and produces hay of the first quality. Horses and cattle eat it with avidity. Farmers in every part of the country give it their attention, as it will make more and better feed than any other kind of grass now known in the United States. It is destined to change the agricultural productions of the country, and substitute cows, horses, mules, and sheep in place of hogs. We have raised hogs heretofore from necessity, simply because our only reliable crop was corn, and other domestic animals required hay, or its equivalent, which we could not produce with cheapness and certainty.

A good crop of Hungarian Grass is about 3 tons and 30 bushels of seeds to the acre.—It will often go beyond, seldom fall below this. Such crops were grown last season notwithstanding the drought.

The seed may be sown in this region from the 15th of March to the 15th of June, at the rates of a bushel to three acres. It should be put into the ground in the same manner as oats, harrowing before and after sowing.

The time for cutting is when the seed is nearly ripe and the plant of a fine yellow color. If cut too early, the seed will not be perfect, and if too late, it will shell out in curing. It may be cured in the same manner as hay, and is fully equal to the best timothy.

*Mobile Mercury.*

◆

HUNGARIAN GRASS–MILLET.—Much has been said of late in the agricultural journals of a grass termed the "*Hungarian*," and application has been made to us to procure some of the seed. The matter has not escaped our attention, but we had some misgivings whether it was not one of our old established grasses under a new name. The editor of the Farmer and Planter, at Pendleton S. C., says it is nothing more or less than the Millet—to the great value of which we have for years past been urgently directing the attention of the readers of the American Farmer who have not meadows whereon to grow hay.—In the first of this month (June,) though the earlier the better, the seed should be sown in our latitude; if the ground is well plowed, say 8 inches deep, and well harrowed, and 2 pecks per acre of seed sown, with say 300 lbs. Peruvian, or perhaps 150 lbs. of that guano, and an equal quantity of Nevassa guano, 3 tons of excellent hay can be made, which will be relished by all kinds of stock, horses particularly. Upwards of 4 tons have been raised from an acre. It stands the drought probably equal to any of the grass family—and is easily cured. After cutting, which should be when the heads begin to turn yellow, let it lay in the swaths a day,—turn it over the next day after the dew is off, and when the lower side is dry, throw it into cocks, increasing their size, and when sufficiently cured, have it stowed away in your barracks or barn.

# EDITORIAL.

## RALEIGH, JUNE, 1858.

☞ The Postage on the N. C. Planter is ½ cent on each No. if paid quarterly in advance; or 1 cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year, to any place in the United States.

### N. C. Agricultural Society.

We conclude in this number of the N. C. Planter, the list of Premiums offered by our State Agricultural Society, for articles to be exhibited at our State Fair, to be held in this City, begining on the 2d day of Novem- next. The Premiums are much more liberal and judiciously classified than those for any previous year, and will, we trust, excite the enterprise and State pride of *all* our citizens to enter the list of competitors for excellence in the various Classes enumerated—in Agriculture Horticulture, Pomology, Mechanics, Geology, Mineralogy, Household Fabrics, Science, and the Fine Arts—in a word, every thing pertaining to *all* the industrial and ornamental pursuits of our citizens. By such means only, can we have it a *State* Fair, as it is designed and hoped emphatically to be.

We hope that all the Editors of the State will present—urgently and often present—the subject of our next State Fair to their readers; for upon them greatly depends its success or failure. It must have the hearty support and co-operation of the Press, in order that its importance may be *impressed* and fixed upon the public mind. And in return, we trust the Society will treat them with the most distinguished consideration and courtesy, instead of the indifference and neglect of which some of them have had heretofore to complain. No institution or enterprise ever lost any thing by being courteous and attentive to Editors—they are sure to repay a thousand fold—whether it be State Fairs, Railroad Companies, Educational or other Corporations. And just here we would drop a hint to the President of each of our Railroads, viz; that they present to each Editor in the State a *free ticket* on their Roads, to go to and return from the State Fair:—indeed *they* (the Railroads) would be the gainers, if Editors were allowed to pass free at all times.

### The State Fair.

We have heard many persons express great regret at the lateness of the period selected for holding the next North Carolina State Fair, viz: November 2d, 3d, 4th, 5th, and 6th, believing that it will greatly lessen the attendance and thereby the interest in the occasion. We are aware that the change made last year, was to prevent collision with other exhibitions, but it is believed that an *earlier*, instead of a later period, would much more have contributed to the advancement of the interests of our Agricultural Society and the exhibition.

It is said (and we believe it) if the North Carolina State Fair was held the first or second week in October, we should have a much larger attendance, and a much finer display of fruits and vegetables. There are many fine varieties that cannot be preserved until November; and those that are, by dint of great care and labor, preserved for exhibition, are small in quantity, to what they would be if the Fair came on one month earlier.

And it is contended that the time selected is at a season of the year when we may reasonably expect cold, inclement weather, which will keep large numbers from attending, and especially of THE LADIES; and we all know how indispensable to the success of our exhibitions, in the presence of our *fair* friends at our Fair.

We make these remarks because so many have spoken on the subject to us. But it is too late to make any change for the next Fair.

Let all resolve to attend this year, however, whether fair or foul weather, cold or hot—and then such changes can be made as circumstances may call for.

We have the prospect of one of the finest crop years, in all branches of husbandry, with which our State has ever been blest, and if the right spirit is abroad in North Carolina, we may rival any of our sister States, both as to the superiority and variety of productions of the soil. Let every one determine to come, and also have something on exhibition at the State Fair for 1858.

## Right Kind of Encouragement.

The most encouraging circumstance that that has occurred since our commencement of the publication of the "North Carolina Planter," was the reception of a letter recently from Wm. A. Faison, Esq., of Sampson county, containing $31, and the names of as many subscribers—making 41 subscribers he has himself solicited and forwarded to us. And, he says—"I shall not stop at this, but but will strive on for more and more, until the North Carolina Planter is founded on a firm, permanent basis." If *North Carolina Agriculture* had only *one* such friend in each county in the State, how soon would this Periodical be a permanent, fixed institution among our Farmers, and what a great improvement would be effected in all the departments of Husbandry in the State.

Mr. Faison very justly places it as the duty of every North Carolina Farmer not only to subscribe to the N. C. Planter himself, but also to labor for its introduction among his neighbors—upon the high ground of *State pride*—love for the land of our birth,—as well as self-interest. He says—

"I promised you twenty subscribers—I have already more than doubled the number; and now I promise as many more, if perseverance will get them; for the more I get the more I want. Happy would I be if I could get every man in Sampson county to take a copy of the Planter; and happier still if every farmer in North Carolina would take it. Who is there that loves his native county and State, that would not like to see this Periodical well sustained, knowing as they must do, that it would tend so greatly to the prosperity and interest of our people. From my heart I say, God bless dear old Sampson, and the good old North State. I love them as I love myself, and want to see every one of her sons prosper. North Carolina is peculiarly an Agricultural State—her great interest is the farming interest, and in no way can this interest be more successfully promoted than by having an intelligent, enterprising Agricultural journal *of our own*, through which we can talk to one another of our home affairs. Such a work I find the North Carolina Planter to be; and it is the duty of every friend to the State to rally to its support with pen and purse. Be assured, gentlemen Editors, of my aid, at all times and in every way."

After such remarks, from a disinterested gentleman, whom we have never seen, it is not necessary we should add one word.—But are there not other Faisons somewhere?

*P. S.*—Another club of fourteen subscribers from our friend Faison, with a promise of *more yet*!—Sampson is now the Banner county of the State, in giving support to the State Agricultural paper. Other Counties may do as well, if one or two friends in each will *try*, as Mr. Faison has done.

☞ John Mercer, Esq., at Supply P. O., Brunswick county, sends us $10—for the Planter. Who comes next?

## Home truths for Farmers.

Unless you are very rich, you cannot afford to keep your cattle on short allowance. If you starve them they will starve you, if milk and butter is your only dependance.

It is bad economy to cultivate a great field for a little crop. Enrich the land and it will pay you for it, you need not fear of suspension or defalcation when you invest manure on your land. It pays a good per cent even when Banks break.

Cut bushes that you wish to destroy in the Summer season with a sharp instrument. They bleed more freely and die. Elders can only be subdued, acording to our experience, by cutting in August.

The foot of the owner is said to be a good fertilizer to his soil.

Keep a debtor and credit account of each field you cultivate. In this way you can determine if your system of farming pays.

When an implement is no longer wanted for the season, clean it well and store it in the tool house. Hoes, spades, shovels, indeed all iron implements, should be well greased with a mixture of linseed oil, tallow and rosin to prevent rust. Rust eats up many thousand dollars worth of tools annually.

Procure good seed, prepare your ground well, and sow early without consulting the moon as to whether she is changing or fulling. A Dutch Almanac never raised a crop of turnips.

Avoid ostentatious display. It will be time enough to build a great barn and a fine dwelling when you have something to put in them.

Keep a record of your experiments and the important events on your farm. Recording your errors will be a benefit.

Animals are more profitable the better they are fed and the more comfortable they are kept. Farmers work for profit.

Good fences keep good feeling among neighbors. When you see a fence down, put it up; if you wait till to-morrow, the cattle may get into mischief, or it may rain, or something may happen that will lead to a law suit.

Above all, cultivate your own heart aright; remembering that in all things "Whatsoever a man soweth that shall he reap" be it chess, cockle, or evil passions. —

◆

"Plow deep while sluggards sleep." If your farm consists of fifty acres of tillable land, make it seventy-five by going one third deeper than formerly. The subsoil belongs to you and you have a right to its fertilizing salts. Delve into it! —

## Warts on Horses and Cattle.

These ugly excresences may be removed by a few applications of spirits of turpentine, which is less troublesome and less dainful than the knife or caustic. In removing warts from cow's teats, apply it when "dry," or, in case of heifers, before they "come in." Try it and we think you will have no cause to regret it. —

## Sweet Potatoes from the Seed.

The yam potatoe vine blooms in August; in about a month thereafter a pod is formed filled with seed about the size and color of sage seed, which should be secured as soon as ripe, as they soon fall out. In the Spring sow the seed in a bed prepared as for cabbage. The plant is very small and delicate, and should be drawn when the ground is wet and transplanted. The leaf and vine is somewhat different from the ordinary potatoe, but the roots are larger and smoother than usual.

The above is the experience of a practical agriculturist and worthy of further investigation. Some of our Alamance planters, so famous for raising fine Irish potatoes, keep their seed from deteriorating by a similar process. Every few years they renew their seed by planting the seed in the little balls growing on the vine, which produces a small potatoe. These are again planted and the product is increased and the quality improved. We hope some of our readers will test the seed of the yam and record their experience for the benefit of others. —

## Turnip Seed—the fly.

We have it stated on good authority that to mix turnip seed with the flowers of Sulphur, and put the mixture in a bottle, corking it tight for some six or eight weeks before sowing, is a sure remedy against the ravages of the turnip fly. It is easily tried, can do no harm, and we commend it to the attention of farmers and planters. —

## Henderson County—Good Move.

The Agricultural Society of Henderson county, N. C., has recently directed "that a copy of an Agricultural paper be furnished each member of that Society, and that the Secretary draw upon the Treasurer for funds to pay for them." This is the way to introduce good practical and scientific information among the Planters, and at the same time induce them to become members of the Society. We have no doubt this step will prove a profitable investment to the Henderson Society, by a large increase of membership; and we know it cannot fail to be the means of causing a greatly increased spirit of energy and enterprise among the Farmers of that community. Let all the County Agricultural Societies in the State follow this noble example, and we know the most desirable results will follow.

☞ Brother Farmers, have you an Agricultural Society in your County? If you have not, go to work and get up one—or if the one you had has gone down, revive it—introduce the resolution of Henderson County Agricultural Society, above alluded, to send the North Carolina Planter to all your members, and the Society will flourish and do a vast amount of good to yourself and your neighbor.

## The Chinch Bug.

We have seen and heard accounts of the appearance of these destructive insects this season, and it is all-important that Planters should be prepared to meet them. Various methods have been proposed to arrest them, but generally of such a tedious character in the application of the remedy, as to try man's patience and prevent an extensive use of them. Mr. William Turnbull, Superintendent of the Model Farm of the Union Agricultural Society of Virginia, has experimented much upon these pestiferous insects. He says he has thoroughly and repeatedly tried soap-suds, but finds it only stuns the bugs for a few hours, when they revive and vigorously re-commence their depredations. He further remarks—"I used spirits of turpentine, which killed both bugs and corn.—Train oil injures the stalks of the corn.—Lamp oil kills the bugs, and does not hurt the corn in the least." He gives his mode of applying it, as follows:

"Take a small syringe and squirt the oil on the stalk of the corn: as it runs down the stalk it kills every bug it touches instantly. I have a lot that was treated in this manner seven days ago, and as the bugs exhibited no appearance of returning life, I take it for granted they are thoroughly dead."

But, as this is a costly oil, being worth $1,50 per gallon, and it takes one gallon per acre, where the bugs are numerous, after mature reflection, he says,—"My friend Dr. John P. Goodwyn and myself have arrived at the conclusion that chinch bugs must be fed; we must provide something for them until a kind and merciful Providence sees fit to relieve us of their presence. We have both been close observers; we have tried to destroy them with various fluids, snuff, &c.; we have also observed what kind of vegetation they seem to be the fondest of, with an eye to furnish them food. Young corn is their favorite; I have seen them leave green oats and wheat to go to young corn. Corn sowed broadcast is their delight.

We now propose that the best manner of saving the corn crop from their ravages is the following: leave a space or belt of land between the wheat, oat and corn fields, in the months of April, May and June: sow broadcast this strip of land, say in April 1-3d, in May 1-3d, and in June 1-3d.—Chinch bugs will not leave the broadcast corn to go to the cultivated field. I have an experiment that will satisfy any one on this subject. Before they can destroy the broadcast corn the cultivated corn will be advanced and they cannot hurt it. If, however, a few should go in the cultivated field, use the lamp oil as soon as you see them, and it will kill all it touches. The chinch bug is an epicure, and is fond of the luxury of young corn. I now have on the Model and Experimental Farm millions upon millions of chinch bugs upon a half acre of broadcast corn. I have the same thing on my own farm."

Mr. Wm. W. Tompkins, of Richmond Va., says he saved his corn last year by the same plan, and made enough good corn stalk hay from the broadcast strips, to pay for his trouble.

◆

## Swamp Manure.

The Farmer, on a large or small scale, should keep this constantly before his mind, as it is a very great item in farming. In the first place it is a great saving of expense; secondly we have the manure nearly where we want to use it: thirdly, it can be made at any period of the year when opportunity offers. The following is my method of doing this: In dry weather, during the summer months, spade out the mud from the swamps or creeks, throwing it on the edge in a ridge; let it remain till the water is in a measure drained from it, then cover or spread on the ridge 1 bushel of lime to two cart loads of mud; turn it over thoroughly, mixing the lime with the mud; let it then lie till wanted for use.

There is scarcely a farm but has a swamp or low marshy ground on it, which is now worthless to the owner. Only reflect how many hundred dollars lie there not paying any interest, only requiring a little labor and judgment to turn it into cash. No operation on the farm pays so well as this, except draining. If lime is not to be obtained, turn the mud over three or four times to sweeten it, and mix all the parts well together.

There are various ways of applying this manure: if it be applied on worn out land, and used for corn, the best plan I have tried, is to lay off the corn rows, running twice in a furrow, then strew the manure thickly along in the furrow, listing up on the top of it, or rather throwing a furrow on it from each side, planting the corn in the centre of the furrow where the manure is placed.

No farmer will regret the labor of making this manure, as the abundant yield of the land so managed, will amply repay him for his trouble. It can be hauled to the field when wanted for use, in frosty or cold weather, when much else cannot be done. Try your old, and as many call them, worn-out fields, with this manure, and you will say it is cheaper than clearing new land, and much easier tended.

◆

Damage to wheat.—We regret to learn that the Wheat in this county (Wake) and other portions of the State, is much more seriously injured by the frosts in the latter part of April, than was at first supposed.—One of our Planters informs us, that a large portion of his crop is ruined.

## The Farmer—Morally and Intellectually.

The Farmers, more than any other class of people, are in a position to enjoy to fullness, the wisdom of God. They are at the fountains of noble inspiration. They live in the midst of goodness. They can see more of the grand and beautiful changes of earth, than others. They minister at the very altars of nature. They can feel the first pulse-beat of the swelling Spring under the sward. They are cheered by the promise-bloom of the Summer. They stand proudly by the ripened sheaves of the Autumn fruition. They are always near the great heart of our kind mother, Earth, and know that its unvarying lifetides are coursing for them. Every spade and share bring the currents to the surface, eddying around every living plant with a tribute to bud, blossom, and ripened fruit. The farmer is a worker with God. He casteth the seed, and with rain, and dew, and cloud, and sunbeam, *He* giveth the increase. And yet, we apprehend but a small portion of our farming friends have thoughts of the real grandeur and importance of their position. They have no enthusiasm in their profession—many of them no taste. They act as the horse on the sweep—always traveling a monotonous round. They do not think of him who giveth life to the seed, who breatheth over the ripening fields, who filleth the barns with fatness. They dream of the probable number of bushels, their value in money, and scarcely realize the higher reward of living and communing with nature and God during those gentle and mysterious processes which give wealth to man, and clothe his habitation with ever-changing beauty and fragrant bloom.

## "Hard Work."

There are many young men who turn away from Agricultural life, to engage in other persuits, because, they say, it is "such *hard work* to be a farmer." Hard work! to be sure it is—but not as "hard work" as you will find it to be, to become a ripe scholar, or a successful merchant. It is "hard work" to *earn* a living in any avocation. A man or woman may be born with silver spoons in their mouths, but unless they toil, they cannot live—they will only vegetate.

Greatness is not often forced upon people. Distinction is not won by child's play. Now and then an eagle mind may swoop down from above and perch upon some dizzy height. But the mass must toil hard to reach the same position. Ten years of patient study, and ten more of severest toil, gave the world one of its noblest histories, and Prescott an enduring fame. What farmer would think of enduring such toil, even for such a fame.

☞ Col. George Barnhardt, of Cabarrus, has sent us at different times quite a handsome list of subscribers, and says, "though an invalid, if I am able to attend the Courts and tax gatherings, I think I will be able to do something clever for your State enterprise, the N. C. Planter." We hope our patriotic friend may speedily be restored to good health, and that he and others will send us good lists of subscribers. By the way, his suggestion is a good one. Soon the public gatherings in the different counties will be held, and our friends will have a fine opportunity to present the claims of the N. C. Planter to their neighbors. If our friends will make a small effort, they may double our list in June and July. Will they not try? We earnestly ask it at their hands.

## Letter from Edgecombe.

Everything on Agriculture, coming from Edgecombe, the great county of Agricultural improvement, is worthy of confidence. The following is from a man of experience:

EDGECOMBE COUNTY, N. C., May 20.

MESSRS. EDITORS: Your correspondent R., of Robeson county, asks the opinion of your subscribers, as to what grasses will grow best on the pine lands of Robeson, and adjoining counties? I would recommend him to try the Orchard Grass. This grass flourishes better in this part of the State, than any grass I know of. It will grow even on sand hills, if the land be made sufficiently rich and calcareous, which you know is indispensable for the growth of any grass. It springs early and keeps green late in the fall. The hay is rather light, but it is very luxuriant, and stock are exceedingly fond of it. But above all other advantages, it will stand the drouth of our summers—I will venture to say—better than any other grass he can find.

The land should be thoroughly prepared, by heavy manuring, marling and liming, and deep plowing and subsoiling. The seed should be sown very thick—at least one bushel to the acre; otherwise it will grow into tufts and bunches. This is an old grass, long known to our farmers, but its claims should not on that account, be slighted.—When well set on land that has been properly prepared, it will last an indefinite time, and become better and better with age; requiring only an occasional top-dressing with ashes and lime. The seed can be procured at Petersburg, Va., at about $2 per bushel. I think the fall the best time for sowing it; so that it may come up early, and get root, before the drouth of summer.

Herds grass would doubtless succeed well on the swamp lands of Robeson, by first draining thoroughly, deep plowing and subsoiling, and heavy marling.

Thus much for the cultivation of grasses in Robeson. But your correspondent will learn, if he does not already know it—that neither

Robeson county, nor any county in eastern North Carolina, is well adapted by nature to grazing, as the principal branch of husbandry. We *can* have and *should* have our meadows and small pastures for a few milch cows, and for young stock; and also, for making a little hay, to eke out the usual supply of winter provender. But nature has done so little for us, that we can never adopt grazing and stock raising, as a prominent branch of husbandry. The soil is not calcareous, and can only be made so, by an immense amount of labor and expense. But our chief difficulty lies in the climate, which is too hot and dry during summer, for any kind of grass to flourish well—the most of it dying out entirely. Near the sea-shore, however, where a moist climate prevails, and where calcareous manures can be procured abundantly and cheaper, grazing is more profitable.

But Robeson can be made a great *grain growing* country. And her *pine lands* when marled and otherwise improved, would be admirably adapted to the growth of cotton. I will take the liberty hereafter, to make some suggestions, as to the best mode of reclaiming the swamp lands of Robeson, and the other eastern counties.

Yours, &c., L.

◆

## Letter from Sampson.

The following highly complimentary letter is from a gentleman every way competent to judge of the merits of an Agricultural work. We thank him for his words of encouragement, and earnestly solicit from him contributions suitable for the pages of the Planter, as we know him to be capable, practically and scientifically, of imparting much valuable information. We should be glad to hear from him every month. His remarks in this letter on Cattle, are well worthy of consideration; and we especially call attention to the benefits which the Sampson Agricultural Society has been to that county. Every County ought to keep up its Agricultural Association. The advantages a thousand times exceed the time and labor given them. But here is the letter:

*For the N. C. Planter.*

Messrs. Editors: On my return home, from a recent tour abroad, I found on my table several numbers of your valuable journal. I congratulate you upon the neat appearance of the Planter, and feel free to say that you have now offered to the public, a publication highly worthy of the patronage, not only of North Carolina, but of the South generally. You may safely console yourself with the reflection, that if the Planter is not sustained, it is not because of anything lacking on the part of the Editors or Publisher. Permit me to assure you, that Sampson County, will do her part in sustaining your enterprise.

The triumphant exibitions of the Agricultural Society of this County, will furnish sufficient testimoney, that the spirit of improvement is abroad with us. This County is now worth *twenty-five thousaud dollars* more than it would have been, had there never been an Agricultural Society formed in our midst. The improvement in stock of all kinds is very perceptible, and the methods of culture decidedly improved.

As the fruit of that emulation which has been kindled at our fairs, I notice that the celebrated Morgan stock of horses is now being introduced into this County. The Messrs Faisons', who are always the active advocates of improvement, in every thing connected with the farm, have recently purchased the splendid stallion, "Touch Stone," the son of "Gold Finder," and the grand son of the celebrated Vermont "Black Hawk." Many of our farmers have also imported within the last year, some of the finest cattle that could be obtained. I am sorry to inform you, however, that a lot of very superior cows, brought into this County from the highgrounds of Virginia, have all died but one. This calamity has thrown a damper upon the spirit of improvement in that line. Here I would suggest, that we should be cautious how we bring cattle from the rich pastures of the mountains, to these parts, where as yet so little attention has been paid to the culture of grass and clover. Gentlemen, warn your readers of the danger of this course. Let them first make suitable provisions for the reception of such stock, and they will then have better success. It is also a dangerous experiment, to buy a cow that has just been driven several hundred miles, while the udder is full of milk. This was the fatal difficulty with several of the cows above referred to. There is, however, much fine young stock coming up in this county, and at our next Fair we expect to make a showing that will not be excelled by any other Fair in the State. P.

Clinton, May 19th, 1858.

## Keep your Seed Pure.

How shall we do it? Don't plant any two varieties of the same family within two hundred feet of each other. Every planter knows that his corn mixes, because he sees the different grains on the cob. Yet it is hard to believe that his cotton will mix, because he sees no difference in the fabric or any change in the seed. But next year will tell the tale. Hence are more garden seeds spoiled by being raised indiscriminately together than most gardeners imagine. Melons, squashes, gourds, and cucumbers are fast blending into one. Okra and cotton will soon unite. Cabbage and long Colwarts are blending the head and stalk.—Turnips will put on heads instead of bottoms. Beets are becoming woody.

We shall soon eat potato balls instead of tomatoes, and the tuber of the potato will become a fibrous root. Whatever grain, vegetable, fruit or flower is saved, should be raised beyond the influence of any of its kindred plants.

---

*For the N. C. Planter.*

MESSRS. EDITORS: It is your request that every subscriber should write for the Planter; and believing myself that there is no one but that has some experience that would in many cases be of great value to his neighbor, I conceive it to be my duty to contribute my mite. As you have gone to the expense to publish so valuable a paper, I think it nothing but our duty to write any thing that we think would be of advantage to each other. We young beginners are very anxious to hear from our fathers, who have been toiling and experimenting for years.

I will give you my views on the preparation of cotton land before planting: In my neighborhood, some of the largest cotton planters do nothing to their cotton land until just before planting time; then they bed up their land in the water furrow between the old rows, and when they get ready to plant they split the beds open with a small plow and plant. I have tried that plan and several others, but my opinion is that all cotton land should be broken up as early in the spring as possible, and lie in that condition until just before the time for planting; then bed up and plant on the beds. Early this spring I broke up a portion of a field that was in cotton last year, and it was well manured in the drill, and the balance of the field lay unplowed until about the 10th of April; then I bedded up the field on the portion that was broken up early:—the cotton came up first, looks well, and is a very good stand; and on the portion that was only bedded, the cotton did not come up so soon, and is dying badly. When the land is broken up, it mixes the manure with the soil, and the young plant is strengthened thereby in the time of need.

JOHNSTON.

---

*From the Spirit of the Age.*

## Early Vegetables.

Believing that we are in advance of most our neighbors, in garden vegetables, this season, we are of opinion it is owing to the exposed condition of our garden spot to the early spring sun. We have had green peas nearly every-other day since the 6th of May, and strawberries also. We had yesterday (May 24,) a plentiful dish of snap beans, squashes, Irish potatoes nearly as large as hen's-eggs, and beets 2½ inches in circumference. Now, who can beat that in the open air, without the aid of hot beds? We have had no advantage over others in the kinds of seed, nor have we resorted to any new process of cultivation. We have been careful to keep the ground around our vegetables well stirred and soft, and watched carefully for the insects that usually riddle the leaves of many early plants—destroying them as fast as they appeared. We had the ground spaded *deep* three times in February and March, turning under a plentiful covering of stable manure. In the dryest time we watered the plants night and morning. The garden was carefully and constantly worked all the time. Our garden spot occupies a high position, gently sloping in a southern direction and has all the advantages of the sun from its rise till it sets. We believe this has had much to do with our having such early vegetables.

[The Editress is too modest to take the praise that belongs to herself, for our very excellent garden, which she justly boasts of. It is all she says of it—and to her skill and attention justly belongs all the credit. She planted every seed with her own hands, and gave its cultivation her constant personal attention. We had nothing to do with it.

EDITOR.]

# HORTICULTURE.

**S. W. WESTBROOK, EDITOR.**

Erratum.—Our article in the May No., constituting our "Seventh Proposition," should have been headed "Training and Pruning," instead of "Framing," &c., as it was printed.

## CANKER IN FRUIT TREES.

### How to Prevent.

It has been very truthfully said, that "an ounce of preventive is better than a pound of cure." We did intend to discuss the subject of Canker in trees more fully in the May number of the Planter, but on reflection at the time, we determined to devote a chapter exclusively to the subject in the present number; because we know of no disease incident to Fruit-trees, that proves so fatal; and more so in the apple and cherry than any other.

Canker is induced by three distinct causes, namely: 1st, During the period when trees take on their rough bark, which we have already alluded to in the May number, and the means necessary to prevent them from doing so at an early age.

Another cause of canker at the collar of the tree, is the reprehensible practice of using sprouts for stocks to engraft upon in nursery operations. We are of the opinion that not one-fourth of the trees engrafted upon sprouts obtained from the roots of Orchard trees, will last twenty-five years; and our opinion is confirmed by sad experience, which we will here relate for the benefit of our numerous readers:

In the year 1843 we purchased 117 apple trees from a Nurseryman, which he afterwards informed us were engrafted upon sprouts that had sprung up from the roots of Orchard trees, and his opinion was, that they were as good as thrifty seedlings, and do doubt he was honest in his opinion. Every attention has been given to the Orchard since it was planted, the trees grew off beautifully the first two years, but since that time a number have died each year from canker, which has invariably commenced at the ground and sometimes a few inches above. Some few of the trees have received bruises by awkward plowmen during the summer, but those bruises were higher up on the tree and have, with but few exceptions, been healed. Below we give a list of the kinds embraced in the 117 trees, the number now alive, and the number affected with canker at the present time:

| | | | |
|---|---|---|---|
| 14 | Limber-twig, | 3 alive. | |
| 13 | Yellow Horse, | 6 " | 4 cankered. |
| 12 | Robeson, | 7 " | 1 " |
| 13 | Ladyfinger, | 9 " | 2 " |
| 22 | Romanite, | 13 " | 9 " |
| 6 | V. A. Pippin, | 3 " | 1 " |
| 13 | Never-fail, | 13 " | 1 " |
| 5 | Golden Wylie, | 2 " | 1 " |
| 8 | Penn. Pennock, | 5 " | 2 " |
| 6 | Johnston's Fav'ite, | 4 " | 2 " |
| 5 | Buckingham, | 1 " | |
| 117 | | 66 | 23 |

The above statement shows the actual condition of the Orchard after fifteen years; 66 of the original 117 trees are alive, and twenty-three of that number are now affected at the root with canker; and if they die off at the same rates for the next ten years, very few of the original 117 trees will be standing in twenty-five years from the time of planting

In 1846 we planted several hundred apple trees, on the same kind of land, which were purchased from Nurserymen that we knew used good seedling stocks; and the result is, that they have not taken the canker, with but very few exceptions, and even the most of those that have perished, were trees that were used to transplant the vacancies in the 117 trees orchard where they had died from canker. When we replanted them, we dug the holes (where the original trees died out) from six to ten inches in diameter, and threw out all the old leprous roots and filled the holes with rich soil from a distance, in order to prevent the young replants from taking the disease. But in every instance, except four, they have died after two or three years, evidently showing that the young trees took the malaria as soon as the young roots reached beyond the limits of the hole that was dug for them and come in contact with the dead roots of the original tree. We learn from the above facts, that it will not do to plant a tree of the same genus on a site where one has died from disease; consequently we have no prospect of making a permanent apple Orchard where the original 117 trees were first planted.

We have now adopted the plan of planting Duke Cherry trees of various kinds in the vacancies, as fast as they occur; and we have some hope that after some twenty-five years of labor and toil, that we shall have a first-rate cherry orchard, which we could have had in in ten years with one-fourth of the trouble.

Bruises or wounds inflicted on the trunks and roots of trees, often result in canker, unless the place is healed immediately by binding soft soap to the place affected. But prevention is better than the cure, for there is some uncertainty in every case in effecting a cure. In order to prevent the ploughman from injuring the trunks of the trees with the single tree and traces, it is important that the traces should be covered with harness leather, and that the cover should pass around the ends of the singletree and fasten to a small staple in the back part of the singletree, in order to prevent the iron from coming in contact with the bark of the tree. The singletree should not be more than twenty inches long.

In reference to mutilating the roots with the plow, we have not a great deal to say; for our experience with dishonest ploughmen is not very satifactory. If all can get a ploughman that is possessed of a sufficient amount of moral honesty, he will raise his plow high enough to pass over the roots when he comes in the vicinity of a tree; but such a man is about as rare as a white black-bird; for there are but few, white or colored, that take a sufficient amount of interest in the affairs of their employer, or master, to entrust with so important a piece of work as the ploughing of an Orchard. All they care for is to pass off the time, or in other words, it is with them "come day, go day, Lord send Sunday," and that quick too.

Our rule is to hold the handles of the plow ourselves for the first few rounds next to the tree, or permit but one person to plow next to the trees, and hold him responsible for all injury that may be done.

## Care of Fruit Trees.

There are so many fruit trees, planted in uncongenial soils, that the cultivator would do well to study their natures and their specific food. The roots of trees will appropriate to themselves and elaborate food from many coarse substances that are buried beneath the surface of the ground, when those substances left upon the surface would afford no more nourishment than so many rocks.—For instance, we have seen the roots of trees send their feeders into apparently solid bones, thus seeking for phosphate of lime. Now, were these bones pulverized, how much easier the tree could be fed. They may be pulverized by grinding, or put into a liquid state, by the use of oil of vitrol, or a strong solution of potash. When it is remembered that all food taken up by trees must be in a liquid state, it is matter of supprise that cultivators do not study to apply that specific liquid food which the most readily developes the fruit or foliage of the tree. Every thing that the tree feeds upon, must be in a perfect state of decomposition. Hence, a quart of putrid liquid manure, will do more to develope the fruit now formed, than a wagon load of fresh stable manure. Those who pretend to cultivate trees, should have a vat under ground, where all the bones, old shoes, hair, &c., can be made into a liquid that can be forked in around the roots of trees. By this process, the Chinese make immense fruit crops from small plats of ground. Feed the tree in its growing, fruiting state, as regular as you would an ox in the stall, and with as great a discrimination of the food required.

*For the N. C. Planter.*

## The Borer-worm.

In a recent issue of the American Horticulturist, we noticed the remarks of some individual in relation to that great pest of Pomologists—the Borer-worm.

It was the opinion of that individual that a winged insect deposited her ovaria in the ground at the base of the hill where it was hatched, and then eat its way through the bark of the tree. As we know better from ocular demonstration, we will give the result of our observation on the subject.

The winged insect that deposits the eggs from which the Borer-worms are hatched, we do not wish to honor with any elaborate description, further than to say that in color, her body has that semi-transparent cast common to a highly polished tortoise-shell, while her long, wasp-like wings are of the color of amber, and being armed with a formidable looking ovipositor, that falls into a sheath along her abdomen and projects out behind in the form of a sting. She is what little boys who have ever been in a wasp's nest, would pronounce "an ugly looking customer!"

This ovipositor she has the power of lifting out of its sheath in the way that a knife-blade is lifted out of the handle, and when out of its sheath has the bright polish and the bluish color of the hair spring of a watch, and the hardiness of adamant. With this ready drawn for operation, she has the shape of a small gauntlet, and stiffening out her legs and elevating her body, by a kind of oscillating motion, she commences boring into the hardest wood, or bark, perfectly indifferent to her, and finishing her hole she then deposits her eggs. I said she bored her hole. This I must take back and state what was the fact. She chisseled it out.

With a good microscope I once watched one drill her hole into the wood of a hickory tree where the bark had been pealed off for the purpose of deadening it. The wood had in consequence the greatest hardness and solidity. She threw out her long ovipositor in the form of a shaft and commenced operation; and I soon saw the point begin to enter the wood, and a fine white dust rise from the wood. I then applied my microscope and discovered that the bright smooth shaft which formed the ovipositor, consisted of two equal parts that were united in the middle on three flat surfaces, and that with the contortions of the body of the insect they worked up and down alternately, and that the descending one was the one that done the cutting. The ends of these shafts my glass showed me to be leveled off like chissels, and brought to an edge as sharp as a razor.

It is now easy to conceive the remaining procees of bringing a borer-worm to full maturity. His mother deposits her egg in the hole she thus chissels into the tree, generally amongst the sap vessells betwixt bark and wood, a few days and it is hatched into a minute magot, feeds upon the sap until attaining some size, when it has the form of the rattles of a rattlesnake, being flat and in short joints, and perfectly alike on both sides. In place of a head, it has a couple of black adamantine jaws, very hard and sharp, which open and shut like the jaws of a pair of nippers. With these, at the approach of winter they cut their way into the centre of the tree and there assume the pupa state, and in the spring are resurrected into another winged insect and fly off to some orchard to do their work of mischief. But nearly all the injury they do to trees, is while they are small and feed on the sap and young wood, eating their way around the tree near the surface of the ground.

S. McDOWELL.

Franklin, May 16th, 1858.

---

*For the N. C. Planter.*

Franklin, Macon Co., N. C. May, '58.

Mr. Editor: I send you the following receipt, which you can publish in your "Planter," if you see proper:

How to destroy Orchard Lice upon Fruit Trees. When you plant out your trees, see that they are free from the germ of the louse, which may be seen on the surface of the bark, adhering closely in the form of a small flax-seed. If after all your precaution the louse appears on your trees, give them a good application of soft soap.

Before our orchard was so multitudinous in its number of trees, we painted them, and they were greatly improved by it. The paint was made in the following manner: After filling a large pot with tobacco stems, we boiled them for an hour, and then boiled the ambere until it was very strong: into this we put brown sugar, salt, spirits turpentine, aloes, sweet milk and lime, we do not recollect in what quantities. Using a large painter's brush, with this mixture we painted our trees which, after drying, were of a deep brown color; but after a few showers of rain had carried off the tobacco juice and aloes, the balance remained and left the tree as white as an egg-shell. After dark, this produced a beautiful and picturesque effect, the trees appearing like a succession of white columns receding away in the distance into a dark background. Once upon a dark night a superstitious individual fled from this beautiful nocturnal prospect, imagining himself to be in rather close contiguity to a community of ghosts.

Yours Respectfully,

SILAS McDOWELL.

## Manufacturing at the South.

A gentleman from Georgia informs the editor of the Bridgeport Farmer, that there are some sixty cotton factories now in operation in that State, and that several have recently been established in Louisiana and Mississippi. The goods they manufacture are of the coarser descriptions, which they formerly purchased wholly of the North, and which gave employment to many hands and much capital in the New England States.—In speaking of these facts, and of the agency of negro philanthropists in securing the present state of things, the Farmer says: "We know of a business firm at the South who formerly purchased thousands of dollars worth of shoes in this State, and Massachusetts, but who now have a large establishment of their own, and manufacture not only for themselves but for a great many others who also used to purchase their supplies in this and the neighboring States. One reason why they have thus gone into manufacturing for themselves, is the vile abuse that has been heaped upon their section by demagogues and presses in this part of the Union. They have been driven, in fact, from our workshops and workhouses, and forced to depend upon themselves. The experiment, so far, has been successful, and laid the foundation for future increase that may, perhaps, go beyond all present calculation."

We think it will not be denied that since Abolitionism assumed its present rabid aspect, the South has done very much to strengthen itself and to weaken the North, by giving encouragement to the building of factories and workshops on its own soil. In this way, instead of patronizing northern labor and capital, it has drawn our nothern mechanics to itself, and hundreds might be counted who have gone from the New England States and are now settled comfortably in Southern localities. We are sometimes told that working men are not respected at the South; but the assertion is wholly untrue. The working men—the intelligent mechanic, we mean—stands much higher at the South than at the North. He finds it easy, if he but respects himself, to mingle in the best society which the South affords; while at the North, lie about it as we will, he is treated very much as Southern people treat their negroes, barring that he is not as well fed and clothed.

*Providence (R. I.) Post.*

## Culture of the Cabbage.

Greens, in some form, comprise the principal of our vegetable diet. And when it is as easy to have the tender blanched cabbage as the tough green cabbage, why not have it? It is thought by many that the cabbage heads better for being transplanted. This is owing to the loss of the tap root. In transplanting the cabbage, carefully cut off the tap root.—It will throw out numerous side roots, which will cause it to head firmer. The cabbage is a great feeder, therefore to have large, firm heads, the soil should be rich. Potash is its special food, and the plant may be fed in its growing state with a liquid highly impregnated with potash. In transplanting the cabbage, no matter how long the stem, it should be inserted in the earth up to the first leaves. This will cause it to throw out more root, thereby giving it a better chance to head.

The soil around the cabbage can hardly be stirred too frequently. The roots penetrating deeply, are not as liable to be cut with the hoe, as many other garden crops. The great enemy to the cabbage tribe, is the green worm, commonly called the cabbage worm. The miller that lays the egg, which produces this worm, may be seen flitting about, just before night, through this and the next month. Each miller destroyed, saves both cabbage and corn, for the cabbage and corn worm are both hatched by the same miller. Fires built just before night in the garden, will entice the millers into the blaze and destroy them.

## Give the Plow and the Hoe no Rest.

1. In order to prevent the growth of weeds.
2. To insure needed moisture through the deposition of a greater amount of dew, upon which plants largely depend—softening the earth, so that the moisture that condenses upon the surface may penetrate more deeply, and rendering it more porous for the easier passage of the atmosphere, for condensation in the cooler soil below.
3. To secure a greater absorption of ammonia.
4. To aid in the decomposition of minerals whose elements are food of plants.

☞ The doom of those who indulge too freely in carniverous enjoyments, to the neglect of the more natural and healthful fruits, vegetables and farinaceous grains, is quaintly set forth in the following stanzas, from our friend, the "Doctor." Let all lovers of hog (who generally consider fruit "unhealthy") read and tremble!

## Ye Rhyme of Ye "Rustyc."

I met a fellow countryman,
  (Twas only yester-e'en)
By day or night, the sorriest sight
  That I have ever seen!
As *ribbed* as is the ribbed sea-sand
  As "long and lank and lean."

His limbs were small, his knees were large,
  His bony ankles, too—
The teeth I saw in either jaw
  Were very dark and few!

The oldest crow that caws below
  *Re*-calls no sadder case,
A Pumpkin his complexion, and
  A pimpled mass his face!

"Oh! tell me, fellow-countryman,
  What is it thou hast done,
That thou dost go, the veriest show
  Beneath this blessed sun!
Recite! rehearse! in prose or verse,
  What *is* it thou hast done?"

Right courteously my countryman
  Did roll his quid and eye,
The while he "hitched his trowsers up"
  To heighten his reply,
And thus did speak, his hollow cheek
  Confirming his reply.

"Twas *want of Fruit*, when I was young!
  (Thy righteous wrath restrain!)
They kept its flavor from my tongue,
  Its fragrance from my brain!
My father's fault!—I lived on salt!
  And lo! this tale of pain!"

"Were there no Apples in those days!
  No *plum*-trees, I implore?"
A "neighbor had an orchard, yes,
  And once a peck it bore:
The Birds monopolized the *peck*;
  The Grubs were a great Bore!

"Twas Bacon! Bacon! all the year!
  And hog through cold and heat!
Twas Bacon! Bacon! everywhere!
  And every bit to eat!
I lived on salt! My father's fault!
  And be his memory—meet!

"And now I'm prematurely old!
  My hair is dead and dry,
There's neither glow upon my cheek,
  Nor gladness in my eye;
My bones are bent! my veins are spent!
  My marrow would not fry!"

Farewell! thou most unhappy man!
  Let all thy warning heed!
Thy wasted youth! thy sorrows!—sooth
  There's wisdom in thy creed!
And *health* to him in trunk and limb
  Who plants an Apple seed!

And joy to him who plants a tree
  Of Apple, Peach or Pear!
Who mulches, prunes and nurtures it,
  With every needful care!
Fine fruit he'll have, to sell and eat,
  And much for friends, to spare!

*Torch Hill, Ga., March,* 1858. T.

# For the Ladies,

## FLORICULTURE.

Greenhouse Plants.—These should now be enjoying their summer quarters. Sprinkle the orange, lemon and camelia plants, over head, night and morning; at night an hour before sundown; at morning an hour after sunrise; taking care they do not get the sun's rays after ten o'clock in the morning; if they do, the foliage will turn rusty or brown, especially of the camelia, and give them an unhealthy appearance. Agalias also require the same treatment. The soil for this plant should be sandy peat and leaf mould, in equal parts. If the peat is not sandy enough, add sharp white sand, making in all about one-fourth sand. Do not press the earth too tight in the pots. Drain them well by placing pot herds, or pieces of broken pots at the bottom, turning the hollow part down to draw the water. None of the other plants should suffer, as it makes a great difference in the blooming of the plants next year.

Bedding Plants.—These should have constant attention; watering them freely in dry weather at night, not commencing to water till an hour before sundown, for the plants will be scalded if watered to soon.—Liquid manure may be applied with benefit. See directions below. Annuals also, should be kept free from weeds, the earth frequently stirred, and seed sown of other varieties, and some of the same kind, which are most interesting. As a general rule, when one lot of Annuals commence to bloom, sow again, to keep up a succession of flowers.

Pansies.—This is a beautiful and showy plant, giving us all the colors of the rainbow; being easy of cultivation, it ought to become a general favorite. It is constantly in bloom, even in the depth of winter. Under the snow you will find it in bloom, being perfectly hardy; and after a shower it has a delicate and pleasing odor. The earth should be very rich for them. The plants begin to bloom very small; but it should be remembered,

"A Plant's a plant, though it but a leaf contain";

and requires attention. A shady situation is best.

Flower Garden.—The beds and borders should be carefully raked over, the earth being previously stirred deep; the vines and creepers should be trained neatly, and in whatever form fancy dictates, as it is the eye which has to be pleased. On old grass plats the blade should often be used, keeping it neat in appearance; the walks swept and rolled at least once a week, which will give the place a clean and neat appearance.

WM. H. HAMILTON, Florist.
Raleigh.

## Liquid Manure.

This admirable assistant to the Gardener, may be made in the following manner: A barrel holding about the same quantity as a flour barrel, should be filled with clean water, then put into the barrel half a peck of chicken manure, unmixed with trash; use this water to the plants twice a week, say Tuesdays and Fridays; filling up the barrel each time after using, adding manure as in the first instance. That which is put in, loses its strength.

## On Roses in Pots.

### BY ROSA.

How often do we see our lady friends at this season of the year purchasing roses in pots, which as soon as they cease to bloom in their drawing room are either set aside as useless or else drag on a miserable existence without ever after producing a bloom worth seeing. This would be avoided if in May or June they were turned out into the open borders and then treated as the following remarks suggest.

Roses in pots may be bloomed by a little forcing as early as Christmas. But without that, they may with the aid of a garden frame to protect them in winter, be very successfully had in bloom in April and May, and in a greenhouse still earlier. It is best when roses are standing out in the borders in the autumn, not to take them up for poting until the first sharp frost has checked their growth. But then no time must be lost, but the whole stock required for pots must be at once taken up, and they may be brought into a shed or under the greenhouse stage, and have their roots there covered over with earth, when they will take no harm for a week or two until attention can be given to geting them into pots. In taking up the roses, however, from the ground, great care should be taken to *lift* their root well out of the soil with the spade, and not merely loosen and then pull them out to the destruction of half the roots.

Roses do not require very large pots.—Those from six to eight inches across will be sufficient, unless the plants are very large. The best mode of potting roses is to have two good heaps, the one of good loam, the other of very well decayed stable manure. Fill the pot one-third full of the manure, then place a little of the loam on that, and then the rose, filling up the pot with loam only. We know that some persons prefer mixing the above ingredients and adding to them some peat or leaf mould, and in such a compost roses will grow very well. But from many years' experience we consider that both in size of bloom, color, and fragrance, roses will be found far superior if potted as we have above directed. Some additional caution, however, is required in giving water to roses thus treated, because the loam is becoming dry. A little practice will regulate this.

After potting, the plants will require to be moderately cut back. The pruning will depend upon the kind of rose. The China, Tea, and Bourbon Roses should not be too severely cut. The Hybrid Perpetual will require closer pruning, say to six or eight buds on a shoot, and the Common Moss, Cabbage, Gallica and Provence roses should have each shoot cut back to the third or fourth bud at their base. After pruning, the plants require to be neatly tied to sticks; and then they may be placed in a garden frame or on the stage of a green-house. If they are in a frame, it is a good plan to plunge the pots in tan, saw dust, or cinder ashes; in such a situation they will require no water scarcely until March; and the glass light on the frame with a little straw or a mat over will be sufficient protection. During severe frost, care must be taken not to remove the mat or straw entirely, so as to expose the stems of the plants to the action of the sun; but still some light and air should be given whenever the weather permits. When frost has touched the stems they should never, until thawed, have the sun upon them. Let them thaw in shade.

As the season advances and the roses progress towards blooming, care must be taken to guard against the ravages of insects, especially the green fly (or *aphis*) and the red spider. The syringe is useful for this purpose; and tobacco smoke will also remove the fly. They should be especially attended to in this respect just before the season of the principal bloom, because when the flowers are expanded they sustain injury from these remedies. But at all times the inroads of these insects must be prevented, for if the plants once become badly infested with them their beauty will be destroyed for the year.

# Mechanical.

*From the Tawboro' Southerner.*

## North Carolina Ingenuity.

We have recently inspected a miniature steam engine, combining modern improvements, and constructed by our ingenious townsman, Mr. John M. Bond—it is somewhat of a sample of what can be done by native North Carolinians, if they will only make an effort.

Mr. I. B. Palamountain, of this town, has also constructed and applied for a patent for a Cotton Plow, called the Edgecombe Cultivator, which is spoken very highly of, as facilitating and cheapening the culture of cotton. He has also made an improved Root Cutter, for clearing new grounds instead of grubbing, which has been highly approved of.

We learn from the Wilson Ledger, that Mr. T. F. Christman, practicable machinist in Wilson, has recently invented, in addition to his marl and water machine, a brick and mortar Elevator; the object of which is to elevate brick and mortar in erecting brick and stone buildings, monuments, &c. This machine is portable— simple in its construction—can be placed at any point round a building, requiring two hands only to work it profitably. A boy that can pick up forty-eight brick in three minutes may place them in the case, and one crankman can elevate them with ease in the same number of minutes and with two able bodied hands, a much larger quantity of brick and mortar may be elevated. This machine is admirably constructed to save time and labor, superceeding the use of the ladder and tackle, and will prove of vast service to brick and stone Masons, especially in cities and towns.

The Warrenton news says:

Our friend Egerton has just shown us an improved Planters Hoe, expressly manufactured to his order. It is quite a superior tool, made of cast steel, with the *eye ready set for use*, and made peculiarly strong.

☞ We learn that Mr. Cox. residing in Pitt county, N. C., has recently placed in the Patent office, a model of a gun invented by himself, so constructed as to load itself, and be discharged thirty times a minute. This is certainly a very important invention in the way of fire arms, and adds much to the genius and reputation of the old North State, coming as it does from one of her native sons.—The gun is said to be perfectly safe in its operations, having been tested and $10,000 offered Mr. Cox of Pitt, and Messrs. Barnes, Kenyon, and Christman of Wilson, for a share in their enterprise.

The Mining and Statistical Magazine. North Carolina Mining Interests.—A friend, (Hon, Warren Winslow,) has sent us a copy of the above periodical for April, 1858, in which we are pleased to find copied in full, Professor Emmons' report on the advantages of the Valley of Deep River, as a site for the establishment of a National Foundry. The Magazine also contains the second of a series of articles by James Eights, Geologist, upon "North Carolina—its Geology, Mining Reigion, Scenery, etc." This article is devoted mainly to the copper and gold reigion of the State, beginning at the farther limit of the county of Guilford. The writer believes that, so far from the auriferous resources of the State being exhausted, they are not half developed nor even yet understood. He considers the prevailing idea of the comparative superficialty of the veins in certain regions, a great mistake. He thinks the deposits are richer as the veins descend, but not so visible because not having been subjected to the same disintegrating influences that have been at work to separate the gold from its matrix nearer the surface and thus render it visible.

We are pleased to find that the mineral resources of our State are attracting that attention which they deserve. We know that our congressional delegation are working in concert to give Deep River its just position as one of the sites to be selected from for establishing a National Foundry. We trust that their efforts may be crowned with success.

The Mining and Statistical Magazine is published by Thomas McElrath, No. 1 Spruce street, New York, and its practical and scientific value is endorsed by Dr. Jackson, of Boston, and by the State Geologist of Ohio, Missouri and Alabama.

## Oil from Iron Ore.

From recent experiments made by Professor Emmons, it has been ascertained that 15 gallons of crude oil can be obtained from a ton of Iron Ore taken from the Deep River deposits in this State. This is a highly important and valuable discovery. The deposits are said to be immense. Great results may reasonably be expected from this discovery. We think the *Wilmington Herald* speaks correctly when it says, "that North Carolina posseses within her borders alone, minerals of a greater variety and of more value than any other six States of the Union put together."

Remedy for Leaks.—A Correspondent of the Lynn News says:—"Some years ago I had a leaking "L." Every northeast storm drove its waters in. I made a composition of four pounds of rosin, one pint linseed oil, and one ounce red lead, applied both with a brush to the part where the L joined the main house. It has never leaked since. I then recommended the composition to my neighbor, who had a Lutheran window which leaked badly. He applied it and the leak stopped.—I made my water cask tight by this composition, and have recommended it for chimneys, windows, &c., and it has always proved a cure for a leak."

To Remove Marks from Tables.—Hot dishes sometimes leave whitish marks on varnished tables when set, as they should not be, carelessly upon them. To remove it, pour some lamp oil on the spot, and rub it hard with a soft cloth. Then pour on a little spirits, and rub it dry with another cloth, and the white mark will disappear, leaving the table as bright as before.

[*Concluded from page 2 of Cover.*]

| | |
|---|---|
| Best Undersleeve, | 4 |
| " " " | 2 |
| Best Hankerchief, | 6 |
| " " " | 3 |
| Best Child's Dress. | 6 |
| " " " | 3 |
| Best Lady's Underskirt., &c., | 6 |
| " " " | 3 |
| Best Gentleman's Shirt, | 6 |
| " " " | 4 |
| Best Boy's " | 6 |
| " " | 3 |
| Best specimen of Plain Sewing, | 4 |
| " " " | 2 |

### No. 62.—Fine Arts.

| | |
|---|---|
| Best specimens of Daguerreotypes, | 5 |
| " " Ambrotypes, | 5 |
| " " Photographs, | 5 |
| " " Colored Photographs, | 5 |
| " Improvement in ambrotypes or Daguereotypes, | 5 |
| Best specimen of Painting in Oil, | 10 |
| d " " " " | 5 |
| Best " " Water Colors, | 10 |
| d " " " " " | 5 |
| Best " Grecian Painting, | 5 |
| d " " " " | 3 |
| Best " Pencil Drawing, | 5 |
| d " " " " | 3 |
| Best Domestic Drawing, | 5 |
| d " " " | 3 |
| Best Architecture, " | 5 |
| d " " " " | 3 |
| Best Monochromatic Drawing, | 5 |
| d " " " " | 3 |
| Best Portel " " | 5 |
| d " " " " | 3 |

---

**W. W. DINGEE, & CO.,**
YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore t the prices named.

| | |
|---|---|
| n 8 horse power, including thresher and separator, | $165 00 |
| 4 horse power, including thresher and separator, | 150 00 |
| 2 horse railway power, including thresher and separater, | 145 00 |
| 1 horse railway power with thresher, | 125 00 |
| fan that will clean grain at once running through, | 25 00 |
| grain drill with grass seed-sower attached, | 75 00 |
| or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, rite to W. W. DINGEE, & Co.,
York, Pa
[6—6t.]

---

" THE SPIRIT OF THE AGE,"
**A Large Weekly Family Newspaper,**
IS PUBLISHED IN RALEIGH, N. C.,
**BY A. M. GORMAN,**
*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*

---

**100.000**
**CHOICE FRUIT TREES FOR SALE,**
**BY WESTBROOK & CO.,**
AT THE
**West Green Nurseries and Gardens,**
NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

**80 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser. to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | |
|---|---|
| 1 Bushel, | $15 00 |
| $\frac{3}{4}$ " | 12 00 |
| $\frac{1}{2}$ " | 9 00 |
| $\frac{1}{4}$ " | 5 00 |
| By the quart, | 50 |
| " " ounce, which may be mailed at a small expense, | 20 |

All purchasers must pay their own freight and postage. Address
WESTBROOK & CO.,
Greensboro', N. C.

# PROSPECTUS

OF THE

# "North Carolina Planter."

The present is the sixth number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

WILL THEY DO IT ?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ POSTMASTERS and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

June, 1858.

Col Wm A Lenoir

JULY NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO
THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

A. M. GORMAN, Publisher, Raleigh, N. C.
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., JULY, 1858. NO. 7.

*For the N. C. Planter.*

## ESSAY

## On the Method of Horizontal Plowing, and Hill-Side Ditching.

Every field, the least undulating or hilly, should be ditched and thrown into horizontal beds—regardless of the nature of its soil; not only for the purposes of preventing it, and the manures that may be applied, from washing away, and draining the land of redundant and noxious waters—which serve to harden it, and hinder the action of the atmosphere from disintegrating and fertilizing the soil;—but likewise for the purpose of retaining the light showers of rain so necessary to production by thus leveling the rows.

Our country has doubtless sustained more irreparable injury from plowing up and down the hills, and for the want of flews to carry off the superfluous rains, than it has from all the crops which it has produced.

It must be apparent to the most superficial observer, that if a proper system of ditching and plowing had been timely adopted, that our lands would have been measurably saved from the galls, gullies, and blighted aspect which they present on every side, and that the reclamation of our worn-out fields must be based upon the general adoption of such a system.

The failure of so many to compass this object, owing, doubtless, to their want of correct information, or to their having used an imperfectly made level, have deterred others from the trial, which difficulty we hope to obviate by the following plain rules which any common sense farmer can practice.

Hill-side ditches should have sufficient fall, if the inclination of the field will admit of it, to enable the heavy rains to sweep them out, as they are subject to be clogged at all seasons, and it would be an onerous task on the farmer to keep them open; and they should be wider in proportion to their length, in order to hold and discharge the waters that may accumulate.

Two inches fall for every fifteen feet of the ditch where it is over two hundred yards long, on clay subsoil, or gravel bed; and one and a half inches for porous ones, are safe general rules. But the disposition of some lands to gully, and the level surface of others, necessitate us in such cases to allow less fall, and with impunity, as they absorb more readily. The rafter-level to be used in this operation, should be made portable, of light but substantial wood, in the form of the Roman capital letter A, fifteen feet in the base, and the cross bar sufficiently high to rest the right-arm upon while operating. The centre of the bar is to be ascertained by reversing the feet of the level on an ordinary plane, or plank floor, and by marking the bar with a lead pencil, where the plumb line touches it at each trial, and the true centre will be found at the point of equal division between said marks; then saw off the foot of the level at fault, until the plumb-line rests on the centre mark. After which, place a block of half an inch thickness under one foot of the level, and mark the bar with a knife where the plumb-line may touch it when one end is thus raised; repeat the operation of placing block on block of said thickness, and marking the bar as before directed, until two inches are scribed, which will serve as an index for any desired fall to be given a ditch.

The plumb is such an one as is in general use by the rock mason, which should be nicely balanced, and suspended from the vertical angle of the level by a very small line, reaching only to the bottom of the bar in order that the wind may less affect its settling while operating. But by the introduction of a spirit-level in the centre and top edge of the bar, one can operate as well in windy as in calm weather. This mode is greatly preferable on that account, and the cost is but trifling, compared with the expensiveness of time, and annoyance.

The fall is to be indicated by marks on the bar or vial with a file, opposite the edge of the fluid as it changes, by raising one foot of the level with half inch blocks as before directed.

Thus equipped, the operator may repair to the field, after it has been thoroughly plowed and rolled, or harrowed, accompanied by a boy with a bundle of small sticks of a foot in length, and locate the ditch prospectively, as near as he can with an eye to the order, convenience and safety of the field, by surveying the area from eligible points.

It is best to commence the ditch at its mouth's end, which should empty, if practicable, into a stream, or gully if not too abrupt; or on a rock, or broomsedge, in order to prevent injury to the adjacent land.

Place the foot of the level which is nearest the marks on the bar at the starting point; and then carry the other leg up the hill-side, until the plumb-line, or fluid in the vial, is opposite the mark desired for the fall of the ditch; and thus proceed up and around the hill to the other side of the field, the boy marking the track by sticking his pegs at the hindmost foot of each step of the level.

Should a shallow gully or valley intervene in the desired course of the ditch, which may be spanned by the instrument, or by a long plank, so as to enable the operator to get the level on the other side, this would be preferable to heading such obstacles; as water does not flow readily around an acute angle; and as the interruption may be filled up with earth and turf, and supported below by rocks or logs.

The ditch should cross such places obliquely, in order that the waters that may run down such gorges, should shoot into the centre of the ditch, instead of striking its bank transversely, in which case it would make a deposit of dirt and soon break over. And should a ridge or plain interrupt the working of the level, after reaching the altitude of the intended ditch, the feet of the level should be reversed, until the margin of the field on the other side is reached. By this arrangement the ditch will empty its waters at both ends, which is as desirable as necessary in long ditches. This plan in all cases should be adopted, and a small space left on such plains, or summits, for the passage of wagons or carts.

When fields are intersected, or bounded by streams and deep gullies, the ditches should be made to conduct their waters into them; but the contrary way to those that flow in such channels, as the length of the ditch by this method will be materially shortened, a desideratum of importance in such cases; as they would be necessarily too long if they carried their water in the course of such natural channels, having a greater fall than the ditch.

No correct standard can be given for the number of ditches, or their relative distances apart in any given field, as that depends entirely upon the surface and natural condition of some lands to sob, or become impact by the action of the elements. It, therefore, must be apparent, that a field having steep hill-sides would require twice, or thrice as many ditches to preserve it from wash, as one of the same dimensions that is comparatively level.

Their number and distances apart must therefore be left, in a great degree, to the judgment of some one of experience; provided his experience has taught him to rather err in having too many, rather than too few ditches on abrupt hill-sides. Fifteen or twenty yards apart in such cases would not be too close; and if the ditches are long, two and a half inches to fifteen feet, would here be an advisable fall.

Ditches should be located at the upper edge of washes, and rails thrown into them when crossed by a vehicle, provided they are timely removed. Should a ditch be disposed to wash too deep, it may be remedied by casting in small stones or green pine brush at its mouth, and along its course, if necessary, at intervals apart.

A ditch over two hundred yards long, should be at least three feet wide in the last quarter, and thrown out with some approved hill-side plow, whose mould-board can be reversed at each end of the ditch.

The number of rows will be governed by the length of the ditch, but in every case there should be one or more short ones added nearest the mouth's end to widen it there. The loose dirt should be pulled out with wide hoes on the lower side of the ditch, and formed into an oval bank, clear of roots and grass; which form is least subject to fall into the ditch from the effect of frost or any other cause. The land should be very moist when the work is done, to insure a firm bank.

The plow will give a good standard for the depth of the ditch on the upper side; next to the bank it should be deeper, so that the subsoil beneath the bank may prevent it from being undermined. Fields should be ditched the second year after they are cleared, as they can never be horizontalized so correctly after the surface is broken by rains.

After having ditched a field as near parallel to each other as the nature of the land will admit, then run the rows for the beds perfectly horizontal. By this arrangement it will be perceived at once, that a number of the rows will cross or rather empty into the upper side of each ditch nearest their mouth's ends; inasmuch as the ditches have a fall of 2 inches to every fifteen feet, and the rows being level.

Such rows will empty themselves, readily, of superfluous water, and retain every light shower. This is greatly preferable to the custom which generally obtains of running the rows parallel to the ditches; in which case they are worse than a nuisance, as each row takes off its own water; having as they do, the fall of the ditch, they will soon form a deposit of the soil where they end. If "whatever is worth doing, is worth doing well," be a received maxim in farming, it should certainly be carried out in horizontalizing land, as it is permanent when well done, and the least deviation from this rule may require more time and labor to repair the damage that may be sustained by waste, than would be expended in leveling the land properly.

The level should therefore be used to horizontalize a few parallel rows between each ditch, at such distances from each other, as to give a general outline of the levels in the spaces to be filled up. Tobacco lots, subject to sob, may have an inclination of ½ or ¼ of an inch in 15 feet of each row. A bull-tongue plow should follow and mark the track of the level, and parallel rows should then be thrown in between, with said plow, on both sides of each row thus leveled, at the distance of ten or twelve feet apart.—This may be easily regulated by a boy walking in said leveled furrow directly opposite the horses' head, with a ten foot rod in his hand so attached to the bit of the bridle as to guide the horse.

The remaining space will then be easily filled up by the eye with parallel rows of width to suit the intended crop, and short gores or rows thrown in, to fill out knobs which may be presented by the inequality of the surface.

The field thus ribbed, may be aptly compared to the frame of a bulged-side basket. The union of the rows with the ditches, and with each other should describe an acute angle, instead of uniting in a circular form, as there would be, in the last case, an unappropriated space left at the ends of the rows.

The identity of the rows may be indefinitely preserved by plowing out one or two rows, only, at a time, in fallowing the land from year to year; instead of flushing all the space between the ditches in one land—which practice creates a bank on the upper side of the ditch, much to the hindrance of the escape of the waters.

The mode of thus bedding the land in the fall, as suggested, is the best possible manner in which it can be left for freezing and absorbing the atmospheric gasses—and as equally well adapted to the growth of the cereals; for the numerous water furrows will serve to drain the land during winter and spring:—nor is such an arrangement objectionable in reaping the grain.

The necessarily lengthened detail of this essay, together with your limited time, forbids farther enlargement upon this fruitful and all important subject to the welfare of our beloved State. But we feel confidently assured that if our imperfect suggestions are fully carried out, that the value and production of our lands will be greatly enhanced, and emigration eventually stopped.

In conclusion we beg leave to inform the Committee, that the plan herewith submitted for their adoption is not theoretical, but one whose practical utility has been demonstrated on a liberal scale for the last twenty years by your candidate for the premium, and substantiated by the accompanying certificate from one of our most enterprising, successful, and intelligent farmers.

Respectfully submitted,

S. G. WARD.

Warren Co., N. C., Oct. 19th, 1857.

Oct. 19th, 1857.

This is to certify that I purchased the farm on which I now reside from Dr. S. G. Ward, in 1849, who thoroughly ditched and horizontalized the hill-sides, which are numerous, lying as the land does in the angle of Flat and Shocco creeks. I have deemed them so perfectly adapted to draft and prevention of washing, that I have made no alteration in any one of them.

JOSEPH S. JONES.

## Of the effect of Gypsum on Tobacco, as tested by a series of experiments.

*Read before the Agricultural Society of Charlotte, Va., and ordered to be published in the Farmers' Register.*

The following from the *Southern Farmer* will give force to suggestions we made recently on the subject of the agricultural value of Plaster of Paris or Gypsum. The remarkable effect upon tobacco is not uncommon, and very familiar to tobacco growers, upon filthy or turf lands especially. The value of ashes for tobacco is also obvious and well known:

At the last meeting of the Society, I communicated the following facts in relation to the effects produced by the application of plaster on my crop of tobacco, then growing. Owing to the difficulty of obtaining plaster, its application was delayed until some time between the 10th and 20th of July, when the larger number of the plants had been topped. It was applied, by dropping from the fingers on the top of the stalk, or in the bud when not topped, so as to be distributed along down the stalk and upon the stems of the leaves where they join the stalk, to the amount of about a half an egg shell to each plant, leaving several rows through different parts of the lot, unplastered. On the evening and night after we finished this process, there was a fine fall of rain, after which I did not again see the lot until the eighth day from the time the plaster was applied, when to my astonishment, the whole lot, which had before looked faded and sickly, had assumed a fine healthy and vigorous growth, with the exception of the unplastered rows, which still retained the yellow and unhealthy appearance. The change produced by the plaster was so obvious and striking that I carried several persons to see it, who readily pointed out the unplastered rows. Among others, some of my fair friends, who (however acute they may be in detecting the difference of quality of silks and satins, would not be supposed to possess any extraordinary scrutiny in regard to the quality of tobacco) as readily pointed them out.—The difference, though obvious in the size of the tobacco, was more so in the color, and perceptible to the feel with the fingers, the leaves of the plastered tobacco evidently having more "body." The difference has existed to the present time, (the 20th of August,) and can be seen as far as the spaces between the rows can be distinctly marked by the eye, but it is not altogether as striking as for a week or two after it was first noticed—and although evident improvement has been produced throughout my crop by the use of plaster, yet, (owing probably to the fact that the remainder of it was on land cultivated in tobacco last year, and of course, clear of litter, and that the plaster was applied after the rain,) the effect is not as obvious in any other part of the crop as the lot referred to. Part of the lot on which my experiments were tried, has been cleared six years—cultivated the first three in tobacco, the fourth in wheat, seeded in clover—rested the fifth (except a small part mowed for hay) and ploughed last fall, with a heavy coat of clover and broom-straw mixed. The other part has been cleared much longer; cultivated repeatedly in tobacco, seeded in wheat and herd's grass, and had remained five or six years in turf—though for several years past, covered with a light coat of litter.

On communicating the above facts to the society, I was requested to test the effect of the plaster by weighing the plants, both in the green and cured state, and report the result. Accordingly, I submit the following, as ascertained by the most careful personal investigation I could make.

The first experiment, was made on two rows, side by side, running nearly east and west on a gentle declivity of a southern exposure, with a soil of gray sandy loam, based on yellow clay—containing each forty-two plants. A man preceded me with a knife, passing on between the plastered and unplastered rows, with instructions to cut every plant thoroughly ripe. In the plastered row he cut sixteen plants—in the unplastered ten; showing a gain in favor of the plastered row a difference of four plants. As soon as the plants had completely "fallen," (or withered,) I weighed the ten cut from the plastered row, which weighed 20 lbs. I then weighed ten from the unplastered row, which weighed 19 lbs—showing a gain in favor of the plastered row of only 1 lb.

The second experiment was tried on two rows extending across a hollow, or drain, through the clovered part of the lot, containing two distinct soils, one which is the theatre of this experiment precisely similar to that on which the first was tried ; the other beyond the hollow, of a chocolate color, based on fine red clay. The plants were cut and weighed, as in the first experiment, with a view to make the test as accurate as possible, and resulted thus : the ten unplastered plants weighed 15½ lbs.—the plastered, 23¼ lbs.—making a difference in favor of the plastered plants of 7¾ lbs.

The third experiment was made in the same rows on the other side of the hollow, in the chocolate colored soil, with the red clay base, with the same care as the others, and resulted as follows: The ten unplastered plants weighed 15½ lbs.—the ten plastered plants 20¼ lbs.—leaving a difference in favor of the plastered plants of 4¾ lbs.

I then hung these several parcels on separate sticks, in the usual manner, (except that they were numbered, to avoid mistakes,) and placed them side by side in the centre of the barn, on the first firing tier, (so that they might be equally cured,) and after curing them in the usual way, stripped and tied them up in bundles as for pressing.—They were then separately weighed, and the results follow:

| | | | lbs. | oz. |
|---|---|---|---|---|
| The 1st experiment—unplastered, | | | 2 | 13 |
| 2d | do | do | 2 | 9 |
| 3d | do | do | 2 | 5 |
| | | | 7 | 11 |

| | lbs. | oz. | | lbs. | oz. |
|---|---|---|---|---|---|
| Plastered, | 2 | 15¼ | Gain, | | 2¼ |
| do | 3 | 10 | do | 1 | 1 |
| do | 8 | 4¾ | do | | 15¾ |
| | 3 | 14 | | | |

| | | |
|---|---|---|
| Total gain in the thirty plants, | 2 | 3 |
| Estimated gain in a crop of 10,000 pounds, | lbs. 2215 | oz. 3 |
| That sold at $8 per hundred will be | | $800 |
| Gain in the sale, | $177 | 20 |
| Off for 4 bbls. plaster at $3 per bbl., | 12 | |
| Nett gain, | $165 | 20 |

ANDERSON C. MORTON.

---

TANSY.—Planted about peach-trees, will effectually banish the peach-tree borer. So say those who have during the past year, tried the experiment.

---

## Practical Hints to Amateurs—July.

BY THE LATE A. J. DOWNING.

If you have a crop in your kitchen garden which looks sickly, water it once or twice with guano water (a handful of guano to a pail of water), stirring the soil with the hoe before applying the water.

This is the season of the year to give *shape* to your shrubs or plants. A little shortening back, on overgrown shoots, will make the dormant buds push out new shoots on parts of a shrub or tree which are deficient in foliage, so as to bring it into good shape before the season of growth is past. For small plants, that you wish to make bushy and thick, there is nothing like *pinching-off* the ends of the leading shoots while they are young. It gives you thick and compact heads of leaves, instead of few and slender shoots.

Don't be discouraged at the inroad of an insect that threatens to destroy your favorite trees or plants. Set about studying its natural history, and depend upon it, if you only get a correct notion of its habits, you can soon exterminate it by a little energy and perseverance. Tobacco water will kill any insect if it is judiciously applied, and perseveringly repeated, however much they may seem to defy it at first. Always use it in the morning, or just at evening ; for it is throwing away your ammunition to fire into the enemy's quarter's in mid-day, when they are wide awake and ready to dodge the fire.

If you want to propagate ever blooming roses by *cuttings*, your best time is now, just as the young wood begins to harden, after the first flowers are past. A frame, sunk on the north side of a fence or a wall, with a sash to cover it, will enable you to raise hundreds of roses with very little attention. Make the soil in the frame six inches deep, of rich mould, mixed with one-half fine sand. In this plant the cuttings, with a single leaf on the top of earth. Water them every evening, leaving the sash off all night and replacing it early in the morning. In case you want them to plant out in the borders, you may let the cuttings grow in the frame, where they strike all summer, covering the glass with about six inches of straw in the winter, and planting out the young plants early the next spring ; but if you want them for pot culture, then of course, plant the cuttings in pots, instead of the soil of the frame; and in five or six weeks they have formed new roots, so that you may repot them—one in each small pot.

To have raspberries very large and fine, you must have a new plantation every fourth year. The soil should be trenched twenty inches deep, and a quantity of coal ashes and stable manure turned well underneath. The raspberry likes cool, deep soil, and a top dressing of guano every spring adds greatly to the size of the fruit.

Look over your cherry-trees, and see that none of them suffer from being hide bound. If they look unnaturally small in any part of the trunk, and swollen in other parts, you may be sure this is the case; and if you do not remove it by slitting the outer bark with your knife, the tree will soon decline. Old cherry-trees are very much improved in health and productiveness by shortening in the long branches at this season of the year, thus forcing them to make some thrifty new shoots.

Plum trees like a moist soil. I have found that covering the ground 4 inches deep with old spent *tan-bark*, is a good way of preserving the moisture and keeping the tree in health. I scatter fresh lime thickly over the surface of tan every year, as soon as the green fruit begins to fall. This kills every curculio that attempts to enter the ground, the tan prevents the weeds from growing, keeps the roots cool, and insures me good crops of plums. I spread it as far as the roots extend, and it wants renewing, or adding to, once in three or four years.

Don't indulge in the folly of *hilling up* all the plants you raise in your kitchen garden. If you study nature, you will see that, as plants grow older, the roots at the base of the stem always incline to *raise out* of the of the earth; from which it is clear that they prefer not to be wholly buried in it. Besides, unless it is a plant that dislikes moisture, you loose half the benefit of the summer showers by piling up a hill over the roots to turn off the rain. It is much better to loosen the ground thoroughly and keep it nearly level.

Liquid manure is of great advantage to crops in a growing state; but it has double the usual effect if applied in damp and cloudy weather.

In raising hedges, the great point is to get *breadth at the bottom.* It is easy enough to get a hedge high enough; but if you let it run up without cutting it back, so as to make a broad and thick baee, you can never make that base broad and thick afterwards. Shorten back therefore, till you achieve what you want at the bottom, and the top will afterwards take care of itself.

If you find any of your favorite fruit-trees are falling from the dryness of the season, or heat of the sun, cover the surface of the ground two or three inches deep with straw. Indeed, nothing benefits any tree so much in this climate, as keeping the roots in uniform temperature, by this coat of straw laid on the surface of the ground.

There are few trees such gross feeders as the grape-vine. Soap suds and liquid manure, applied every week, will give an amount of luxuriance and a weight of fruit, on a single vine, that seems almost incredible. I have seen an Isabella Grape produce 3,000 fine clusters of well ripened fruit in a single season, by the liberal use of manure, and soap suds from the weekly wash.

If you wish to bring fruit trees into bearing at an early age, pinch off the ends of the shoots now, and again at the end of six weeks. This accumulates the sap, and the surplus becomes fruit and buds for the next season.

The secret of neatness and enconomy in summer culture of a garden, is to *stir the ground often.* It is a trifling task to destroy an acre of weeds if you take them half an inch high, but a very laborious undertaking to get them subdued, if they once are allowed to make strong roots and leaves of full size.

AN OLD DIGGER.

[*The Horticulturalist.*]

## The Field Pea. Its Permanence as a Fertilizer, and a Preparatory Crop for Tobacco.

The corn-field pea has not, as a general thing, succeeded above tide-water as a preparation for the wheat crop; and instances have occurred, as in our own experience, where the wheat crop was very seriously curtailed by a pea fallow. Other cases, also, are known in which it has failed to reproduce its own seed, though the vine has been most luxuriant.

Still it may be made to serve a valuable purpose in that region. One such at least, we think, is its application to the land the year preceding a tobacco crop. We have not heretofore recommended this, because some said it would not show its improvement beyond the year it was seeded; and others, that it ought by all means to be fallowed in its green or succulent state, or its value would be lost.

The following experiment assures us to the contrary. Last Spring we fallowed up and put in oats all that we could of a particular field that had been the year before in corn.—But a protracted rain made it impossible to sow or fallow the whole until it would have been too late. All the land fallowed was not got in: and a strip in a wet white flat, thus excluded from oats, was at the proper time—only it was too early—sowed down in peas; so that the strip of peas grew between oats on the one hand, and uncultivated land of the same quality on the other. This Spring the whole was fallowed and again sowed in oats, and now presents this appearance: The strip on which the peas grew is a very fine crop: the oat-stubble shows a very good crop; and the land that *rested* a very ordinary crop. From this experiment, which finds abundant analogy in other green manure crops, and is supported by theory, two results may be inferred: 1st. That peas need not be fallowed until the year after their growth. 2nd. That their fertilization will certainly last until that time.

These deductions are all that we need to assure us of the practicability of a pea-fallow to precede tobacco; and if it can be applied to that purpose it will be very valuable.—The difficulty with most people now is to obtain sufficient putrescent manure for their tobacco; and a great deal of useless labor is encountered in hauling stalks and wheat-straw into a pen, treading them and saturating them with voidings of cattle, and hauling them out again. In many cases this quantity of coarse manure is still further increased by hauling litter from the woods. It takes in that way as much labor to manure the land as it does to cultivate an ordinary crop on the same area. In fact, where the land lies at the barn-door, and is distant from it at its farthest point only six hundred yards, it will take the teams and hands of a farm longer to haul and deposit, without spreading, ten wagon loads of manure per acre, than to plough and harrow the land with two or three-horse ploughs. This we know; for we have just tried it. When that is done the manure is not much better for tobacco than the straw would have been; and neither answers as well as a condition of vegetable matter more nearly approaching humus.—Now this may be attained by sowing peas and ploughing them down at such times in the Fall, Winter, or Spring, as may be convenient. The shade of the growing peas is itself fertilizing, and the vines begin to rot as soon as warm weather commences. A very light dressing of stable or farm-pen manure, or of guano, if stable manure be not at hand, will furnish the tobacco with everything else it wants.

Peas *may* not be desirable where all the land of a farm is sufficiently charged with vegetable matter; but very few farms present this condition. On nearly all are spots of land which it is very desirable to improve, in many cases too remote from the curtilage to admit of economical manuring in the usual way. On such places, peas, on a very light cover of straw, or woods litter, sowed down by the middle of June, will, in a decent season, give a growth which a good November or December ploughing will convert into a fine tobacco tilth; and every planter knows that his land once up to that point, except in certain very peculiar soils, it is his own fault if it is not thenceforth rapidly improved.—On such places the land may be ploughed and sowed in peas in less time than it would take to manure it; and the manure may be more beneficially applied to other tobacco; or as a top-dressing to grass or clover lands. It is possible that in many cases the land thus treated with peas would at once produce as good tobacco as the lots, especially if aided by guano, as by all means it should be. In other cases the planter must look to the improvement of his land as a part of the profit from the crop, frequently an incident not to be despised.

Finally, we would say to those who doubt the speedy cure of galls in this way, that we would be glad to show them, on some spots of our own, on hills from which all the soil had become abraded, the happy effect of one application of rotten straw and one sowing of peas.—*Southern Planter*.

## The Wheat Midge.

Wheat, the most important of all our staple crops, is liable to more casualities and depredations from various insects, than any other cultivated in the United States.

The wheat fly, commonly called the Hessian fly, is said to have been introduced into the U. States by the Hessians in the time of the Revolutionary war. For many years the injury to the wheat crop caused great alarm among the farmers of this country.—By change of seed and by early and late sowing the depredations of this insect have, in some degree, been checked of late years in our country.

The most formidable enemy to the wheat crop now in the United States is known under the name of Wheat Midge, (*Cecidomyia Tritici.*) Of the manner by which it was introduced into our country, we believe it is not generally known. The Wheat Midge was first clearly recognized in 1820, in the north west part of Vermont, but Dr. Fitch claims to have some evidence that it was in our country several years anterior to that date, although it did not become so numerous as to attract particular attention until eight or ten years afterwards. In England it was known as early as the year 1771. Since its depredations have become alarming, and its habits observed and understood, it is ascertained that it is making a steady and gradual yearly progress westward.—When we first saw it in 1835, it had reached Albany county, New York; it has since extended over a considerable portion of Ohio and Indiana, where in 1854, the loss resulting from its ravages amounted to millions of dollars. So generally destructive was it in New York in that year, that Col. B. P. Johnson, the efficient Secretary of the New York State Agricultural Society, addressed circulars to the principal wheat growers of the State, with the inquiry, "To what extent was the wheat crop in your vicinity injured by the midge?" The facts thus derived were authentic and complete, and placing the estimates at the lowest figures and far within the truth, it was ascertained that the value of the wheat destroyed by this insect that year, at the fall prices, amounted to the enormous sum of *fifteen millions of dollars.* Estimating the wheat thus destroyed at the price to which it afterwards rose in the market the same season, the amount of loss would have been several millions greater. In several States, the present season, the crop of wheat has been much injured, tho' to a less extent than in 1854.

The Midge is among the smallest insects visible to the naked eye.

*Valley Farmer.*

*From the Southern Planter.*

## Cultivation of the Corn Crop.

HENRICO Co., VA., May, 1858:

*Mr. Editor.*—It may not be out of place to give, at this time, what I consider to be the best method of cultivating corn upon light land,—and I give this plan because I think it will be found to be less labor than that usually adopted. In the first place the land should not be plowed *too deep.* This may seem a sentiment of the retrograde order at this period of deep plowing, but still it is true as preaching with regard to the light lands of this portion of the State. If it is desired to break such soil deeper than five or six inches, it must be done with the subsoil plow or the cross; if not, the land itself will suffer in consequence of the poor subsoil turned up to the surface. Land for corn should be broken up as near to the time of planting as practicable, so that the earth may be fresh and mellow for the young plants.

These remarks are too late for this season, but as our friends cannot profit by the first part, perhaps they may in some measure by the latter.

The land now is to be well harrowed and drawn off four and a half feet with a single plow, (deep enough to prevent the grain from being moved by the harrow;) the corn dropped two and a half feet apart, and three or four grains in a place; it should then be covered with a cultivator, the front tooth of which has been removed, followed by a double harrow.

This planting leaves the land in nice order, and checks the grass till the corn is large enough to cultivate. As soon as the plants have three or four leaves, run a narrow tooth cultivator twice in each row. After the cultivators have gone through once, let them go immediately over again, the hoes following and thinning out the corn to one stalk. If the cultivators have been worked properly—that is, deep and close to the corn as possible—there will be little for the hoes to do but thin. I believe that hands can hoe nearly twice as much corn in this way as they can after "siding" with a plow. If this is completed before harvest, I would say run once in the rows again with the cultivators, as I think it is an error to plow corn before harvest; and if it is done the grass will generally be found to have taken possession of the rows again, and will require hoe-work, or that the rows should be thrown up high enough to plant sweet potatoes on. After harvest let the ploughs go through the corn, two furrows to the row, as shallow as possible so as to cover the grass, then break the middles with the cultivators, or, if the grass is too strong, with the plow, very shallow.

Corn roots should not be exposed to the sun and broken by deep plowing.

Now take care, if you pull the fodder at all, not to do so too soon, and you will gather the best crop that the land and the season (and the chinch bug) will produce, with as little labor as the corn crop will admit of.

Yours, Y.

## Smoke for Wounds on Animals.

MR. EDITOR:—I have two valuable remedies, and not being able to find either of them in any agricultural work with which I am conversant, I place them at your disposal. They are *smoke* and *molasses*. My father once had a vicious horse eight or ten years old, which he altered, hoping to make him more manageable. The operation being not well performed, the cord dropped off, the poor animal bled till he could scarcely walk without reeling, and the parts swelled to an alarming degree, and father having in vain tried every expedient at his command to remove the inflammation, gave him up for lost, and told me to drive him into the woods and there let him die. Fortunately, at this stage of the case, an old Pennsylvania teamster came to our relief, and recommended smoking with old shoes. A smoke was made of old shoes, soles and all cut to pieces, in a hog trough, and placed under the swollen parts.—In a few hours the swelling wholly subsided and the sore commenced discharging matter—the horse was saved.

Some years after this I heard two persons talking about a horse that had been gored in the abdomen. In this case, too, everything had been tried in vain. The poor creature must die. At my suggestion he was smoked, and when I next heard from him the old horse was well. So much for old wounds.

In the same year I cut my foot with an axe. The lady of the house, seizing the foot while it was yet bleeding freely, held it over a pan containing smoking tag-locks. In a few minutes the bleeding stopped, and the smoke was removed, and the bandage applied to protect it from accidental blows. The wound never maturated, and consequently never pained me.—I have seen this remedy tried in many similar cases, and always with the same results. Let the reader bear in mind, that no liniment or salve, drawing or healing, should be applied.—You have merely to smoke the wound well, and nature will do the rest.

I suppose the smoke of burning

wood would produce the same results, but it would not be so manageable.—There is a principle in the smoke of wood which, when applied to flesh coagulates the albumen, thus rendering it unsusceptible of putrefaction. The same principle stops bleeding by coagulating the blood. It promotes healing, and may be applied with decided benefit to almost all ulcers, wounds and cutaneous diseases. See Turner's Chemistry, by Liebeg and Gregory, p. 1242.

For chapped hands and lips molasses is the best remedy I ever used.—If my cows have sore teats, or an ox chafes off the outer skin so as to occasion the blood to start, I apply molasses.—*Cor. of Country Gentleman.*

*From the Southern Farmer.*

## Soapsuds Effectual for Destroying Chinch Bugs.

Messrs. Editors: Among the many tribes of insects which devour the vegetable products of the farmer, that numerous species called chinch bugs are at present the most alarming.—Should they increase from year to year (and we see nothing to prevent except the powerful operation of some natural cause unknown to us,) they will in time not far remote, sweep all before them. It seems necessary, in order to concentrate our efforts in one common cause against our numerous enemy, that investigations and experiments should be made known. An experiment fairly made, whether successful or not, will have its use. If successful it is of great importance; if not it will prevent a repetition, and may lead to one of more efficacy.—There are many ways proposed for destroying the bug which so much injures our crops. Soapsuds I had seen recommended as a destroyer of the bug, and with a view to satisfy myself of it, I tried it on a small scale and it kills all with which it comes in contact. The experiment was completely decisive that suds is effectual to the bug, and there is no doubt of its acting successfully if made very strong. I made the experiment last Friday week ago, and to be certain that the bugs were killed, I visited the spot the day after and found them on the ground and stalks of corn as I had left them; and to be better satisfied that they were dead, I gathered about a teaspoonful of them in a small box, and they have not yet kicked, that I know of, since they gave up the ghost. It is said by some persons that soapsuds will not destroy them but merely stupify them. If such is the result of their experiment, it is because the suds was not made strong enough; if made sufficiently strong and the bugs thoroughly soused, they will die in a short time, and pretty effectually so too. Any how, such is the result of my experiment. But soapsuds, like most of the remedies suggested, is too slow and tedious for the application to be made on a large scale, and cannot be attended with much success unless frequently applied; and the expense of money, time and labor to accomplish it, one would not be repaid for in so doing. I've given this account of my little experiment for the purpose of showing what has come under my observation, as there seems to be contradictory opinions respecting the efficacy of suds as a destroyer of the bug. With regard to it as a certain destroyer of the bug, I can speak with much confidence. I dare say that Mr. Turnbull's idea of saving the corn crops from the ravages of the bugs by sowing a belt of land in corn between the wheat, oat, and corn fields in the months of April, May and June, is a good one, and well deserves a trial by the farmers next year. I think it advisable as soon as they congregate in prodigious numbers in the broadcast corn, to use means to destroy them, as we may in this way easily exterminate them by the wholesale.—Soapsuds, in my opinion, would be one of the easiest, cheapest and surest remedies to use. We must fight as well as feed them. It seemed to me that the Chinese sugar cane of any kind, sowed broadcast as suggested by Mr. Turnbull, would be preferable on account of the sweetness of its juice to our common Indian corn. It would be well to try the experiment at least. It is to be hoped that some more effectual means to arrest the ravages of the bugs than have yet been discovered will be found out. I shall be glad to learn, through your paper from time to time, the result of experiments, and shall have no hesitation in communicating such as come to my knowledge.

I am, with much respect,
Your ob't serv't.
B.

Amelia Co., Va., July 28, 1856.

### Good vs. Bad Breed of Hogs.

Reader, did you ever see a shoat while rooting kick up every time he bored his nose into the ground, as if trying to stand on his head? If so, don't buy him; he will not prove a profitable feeder. We might call these a sub-soil variety.

Did you ever see a hog that would grab an ear of corn and run a quarter of a mile before he would stop to eat? If so, beware. We will place them in the same catagory and for the sake of distinction will call them the elm-peelers. Did you ever see a tall, slab sided, long legged, razor backed breed that were always hungry, and when opportunity required, would climb up to where the rails in the fence were some distance apart, and then either slip through a crack or throw off a few rails and jump over? If so, don't purchase unless you are a small farmer and can't possibly build corn cribs.—We might, perhaps, call these free soilers or else barn burners.

Did you ever see a slim, dead alive kind of thing that would get so poor as to be obliged to trot before and canter behind when required to get up motion, and still not die; its eyes both coming out at the same hole, or at least so near it that the hog appeared cross-eyed? If so, let us pass the dismal picture and simply call them old liners. All these breeds may be described as follows: Long ears, large, heavy heads, long and thick legs, a streak of lean underneath a thick gristle and that covered with a thick, tough hide, with abundance of bristles, and, in fine, a great amount of offal of every description.

Such animals have no thriftiness, no capacity to fatten, and very little about them that is digestible after they are killed.

Considering the number of hogs that are raised annually in the United States, and especially as so many depend almost exclusively on the hog crop for the money they need, is it not wonderful that so few persons take pains to obtain the best varieties?—Suppose you have to give $20 or even $50 for a pair of pigs to begin with. Is this an insufferable obstacle? I answer no. Doubtless you may procure a good breed for less money, but let us look at the practical proof, on the score of economy and see how long it would take it to pay at these figures. Suppose you have 100 hogs of the alligator or land pike breed which you sell at $5 per hundred. 150 pounds at twelve months old will be about all you can make them weigh. Here you have $7 50.

Again, take 100 hogs of a good breed which will weigh at the same age and with less feed, 250 lbs. Here you have $12 50, making a clear profit of $5, without taking into account the save in feeding, which would no doubt, swell the profits to a much larger amount. A hog that has to be kept more than one winter, before fattening, will eat his head off in all cases. Hence the most profitable kinds will be found in those hogs which attain the greatest weight (without extra attention) in from 12 to 18 months.

Pick for a hog with a small, clean head, rather small bone, body low to the ground, long and square, hams full and round, disposition quiet and pleasant. Such a hog will always insure a good return. If you can come across such hogs, whether called Berkshire, Woburn, Suffolk, Grazier or what not, get some and try them.—They will not disappoint you.

A word to the wise is sufficient.

*Valley Farmer.*

*From the Cotton Planter and Soil.*

## Corn and Cotton Culture.

*Dear Sir:*—I perceive that your paper is devoted exclusively to improvements in Agriculture, and an interchange of opinion among planters, each giving his peculiar mode of farming. Catching the spirit from your correspondents, I feel inclined to pen a few thoughts upon the cultivation of corn and cotton, the two leading crops with every Southern farmer. I will first make this preliminary remark, before detailing any plan or plans. My constant aim has been, not to produce the largest crops by driving and pushing, but how to make *competence* with the least amount of labor, has been the grand *desideratum* with me. I think I have in part attained this object by observing the following rules in the cultivation of the crops above named.

I will begin first with the corn crop. Prepare your land well by plowing broadcast, deep and close, and as early as possible, so that your land may get the benefit of at least a portion of the winter freezes upon it after it is broken. It mellows the soil, and the frosts and snow (if it snows) I consider equal to a light coat of manure. About two weeks before the planting season, commence running off your rows, regulate the distance according to the capacity of the soil. On land that will produce from 12 to 15 bushels corn per acre, I would say that 5½ feet is the proper distance for the rows. This done, commence hauling out your cotton seed manure. Ascertain what amount of cotton seed each hill of corn requires, and distribute them over the field accordingly. I think it is a good rule to put about a half pint of cotton seed to the hill; this will take about 16 or 18 bushels per acre. A very convenient, and at the same time a very regular way of putting out your manure is to get a basket that will hold just 4½ bushels. Begin at the tenth row from the outside, step off 17½ steps from the end, and throw out a basket full of cotton seed; continue upon the same row 35 steps farther, and throw another basket, and so on to the end of the row. Make the nineteenth row from this your next heap row, and proceed in like mannar over the entire field. You now have your manure out, and each heap contains exactly 4½ bushels, and is calculated to manure an area 17½ steps every way from the heap, just a quarter of an acre, or at the rate of eighteen bushels per acre. Follow this plan, and there will be no seed left behind to move again, and no lack of seed on any part of the ground. Your cotton seed being now put to their places, commence planting corn about the 15th March. Sooner than this is attended with some risk. Get a very long scooter, and run in the furrow that has already been laid off. This will open out the furrow well, and your grain will be planted deep in the earth, which is a decided advantage in time of drought or freezes, and no disadvantage whatever at any time. Select good, firm, heavy corn for seed; break the ear in the middle and use only the butt end; drop the corn 3 to 3½ feet in the drill, (I speak of ordinary uplands) put your cotton seed on each side of the corn, and cover with the hoe. A good hoe hand will cover it better than any other plan. Another advantage in covering with the hoe, the moles will not find it so easily; but if you have other business pressing upon you, a plow, fork, harrow, or board will cover tolerably well.

The corn crop being now properly planted, we will next discuss the proper plan of working it in connection with the cotton crop, and it is in this connection particularly that I adhere to my plan with so much tenacity. The first working, I would run a small, long scooter next to the corn as deep as possible, and another furrow with a large size scooter next to that; let the hoes follow, thin out and give it a thorough hoeing. You have good time now to do it, for the cotton does not yet require your attention. The hoe and plow force being equal, which I think is the proper rule, the hoes will not be able to keep up. When the plows are done running four furrows round, let them go back and break out the middles, and by this time your hoes will be over and your corn will then have one full working, with both plow and hoe.

Your cotton, planted any time before the 15th April, now begins to demand your attention.—Plow it over as speedily as possible with two furrows to the row, using a scooter, or bar plow if preferred, the bar turned to the cotton. Now leave your cotton to the care of the hoe hands, and go to the corn. Plow every-other row out and out with large scooters. Your corn will do just as well with this kind of work as it would with every row plowed. You can do this in precisely half the time it would take to plow every row, and you are now ready to enter the cotton field again before the grass begins to make any show. Use a barrel head that will cut 19 or 20 inches, and two furrows with this will brush out your whole row, dirt the cotton and leave it clean. It is important to keep grass out of cotton. Grass is never much dreaded in corn, but it is among cotton, where Gen. *Green* is such a terror to the farmer, and every advantage that can be taken on him now, before his army begins to march off in all directions, fortifying its position at every joint, ought to be taken (farmers know what I mean). Defeat him at the start, for once in the grass there is no way of scheming out. You get out only by hard work, or an answer to Joshua's prayer for the sun to stand still. The plan I have suggested of working corn every-other row, gives the advantage at once over the grass in cotton, by getting into it so often with the plow that the grass never has time to take a start, and the work is pleasant and easy all the while to man and beast. I can assure those who will give it a trial, that corn managed in this way will not suffer. It will make a full crop. I make it in this way every year, and have sold corn every year since I commenced farming, fifteen years ago.

I will add, in conclusion, that I do believe that if I were to take the time to plow my corn out and out in every row, with a full crop, I would be in the grass nine years out of ten, and have my mules and negroes worked unreasonably hard to get out of it; besides having a great deal of mental anxiety and trouble, a calamity which invariably may be averted by judicious management, if the hands keep well. The main secret lies in giving cotton *two* plowings to *one* of the corn, which is accomplished by the *every-other-row* plan of work. A wise man said, "prevention is better than cure," and it holds as true, in all probability, with regard to grass in cotton as in any subject to which it can be applied. Yours truly,

J. M. W.

*From the Farmer and Planter.*

## "Rest and Weeds."

Mr. Editor:—We have watched with some interest the battle of 'weeds' of which your excellent journal has, for some time past, been the field.—We are a warm advocate of this much abused plant, regarding it as the planters best ally in opposing that sterility which almost necessarily follows our clean system of tillage. Your position of hostility to weeds and necessarily to the commmon system of resting land, strike us as against all science, as well as experience. How did our globe become originally fertile but by that very process which we wrongly call rest? Geologists tell us that the globe was originally a mass of rocks, and that these gradually disentegrating by the atmospheric influence, became the basis of all soils; that upon this simple soil the ruder forms of plants sprung up—plants we fancy to which the hog weed and fennel would be marvels of vegetable development; that these decaying and becoming incorporated with the debris of the rocks, formed a better soil, giving life to a better form of vegetation, which in turn was added to the cumulative fertility of the mass. And thus has the process ever since gone on. The fertility of the different soils resulting in the main from the ogriginal rocks which composed their basis. Now, when man comes in with his cultivation, he but arrests this benign process of nature. So long as he takes crops from his soil without adding anything in the form of manure, exhaustion must follow; but as soon as he steps out of the way—gives up his fields to rest, nature again takes up her fertilizing process, and the rapidity of restoration will depend upon the degree of exhaustion which has taken place in the soil, and the original character of its basis. This theory is entirely sustained by the experience of every one. Who has not observed the improvement which takes place in the corners of fences—rapid where the soil is rich, and when poor or exhausted, slower but still steady, while the cultivated fields are becoming less productive? The whole process of the formation of good soil from the barren subsoil, may be observed from ditch banks or upon the leves thrown up to protect our river lands. At first they are entirely barren, but soon a coating of gras is formed, next weeds appear, then shrubbery and trees, and thus in comparatively in a few years, that which was a yellow inert mass, becomes a black mould teeming with luxuriant vegetation. We must concede, of course, that the improvement in these cases is more rapid than we have ever experienced, or must expect in our cultivated fields, and this to our mind must be ascribed to two causes: First, the subsoil which is thrown out is in a virgin state. Having been beyond the reach of cultivated or natural crops, it possesses intact all the inorganic elements necessary for vegetable life. Secondly, from the loose and spongy surface which these banks present, they must rapidly absorb carbonic acid ammonia from the atmosphere, and thus become early and largely prepared to sustain vegetable life. But what takes place here, certainly does take place in all rested soils. Nature seeks to restore that which man has taken away. But like a patient recovering from disease, the strength regained is in proportion to that possessed before.

It is scarcely necessary that I should remind auy of your readers why this improvement occurs—that plants feed upon the atmosphere as well as upon the soil so that when they decay, something more is returned than was taken from the soil. Again, not only do plants feed upon the soil proper, as well as the atmosphere, but they send down their roots into the subsoil, seeking their mineral elements where they abound most, and thus by the process of vegetation, the soil holds tributary both the atmosphere and its own subsoil. Seeing, then, Mr. Editor, this simple fertilizing process of nature, and that weeds are her favorite instruments in the work, it seems rather ungrateful to stigmatize them as pests. That they are sometimes troublesome in the grain field, may be true, but the cotton planter would do well to exchange for them the greater pest of grass.

Now it frequently happens that nature may be assisted by art, instead of leaving her to work in her own way and with her own tools, results may be more expeditiously obtained by supplying her with better tools. Hence in countries where land is high and labor comparatively cheap, enlightened policy has taught that where the elements of fertility are not supplied in the direct form of manures, it is always expedient not to rely upon the spontaneous vegetation of the soil, but to furnish a crop which, by its greater capacity of feeding, both upon the atmosphere and subsoil, will more rapidly effect the work of restoration.—But with us the case is far different. We have cheap land and comparatively high labor, and we doubt whether any crop which could be put upon the land, possesses such advantages over the indigenous growth of the soil as to compensate for the labor of seeding.

Some of our weeds (the hog and star weed, for example,) possess those characteristics which would indicate them excellent renovators of the soil—a spongy leaf and stem, and a tap root of very considerable length. Edmund Ruffin, in his enthusiastic admiration for the field pea, styled it the "Clover of the South," and from it anticipated the highest benefit to Southern Agriculture. But even he admitted that where the soil possessed but a small degree of fertility, it was policy to rely upon the spontaneous vegetation.

E. E. E.

Society Hill, S. C., April 8th, '58.

## About Raising Young Calves.

A friend in the country writes: "We had a very fine calf, and for want of time to fit a proper place for it, we let it run with the cow till it was two weeks old. We then put it by itself in the early part of the day, and at night fed it new milk from the cow. The next morning we did the same and, as it had been in the habit of helping itself from the cow when it liked, we thought we would feed it at noon too. Accordingly we warmed about two quarts of skimmed milk which it ate very readily. At night we gave new and skimmed milk mixed, about half and half. I should think the calf drank about three quarts.—In the morning it seemed rather stupid, but drank about a quart or three pints of skimmed milk. At noon it was very sick, and died before night.

To discover what ailed it, we had the stomach examined, and found in it a lump of curd as hard as a new pressed cheese, as large as a large goose egg, and very much the shape of one, drawn out in length about five inches. It must have been the skimmed milk that caused the calf's death.—We suppose we gave it too much, as it ate readily, with little trouble.—They are generally so hard to learn to eat, and get so little into their stomachs at first, is perhaps, the reason that such cases are not oftener heard of. The only other one of the kind I ever did hear of, happened in our town this winter, but we did not know of it soon enough to save ours.

* * *

## Milk Sickness. Its Cause and Cure.

We clip the following from an Illinois exchange paper. As there are localities in this State where this disease is said to prevail, (though we are not aware that the precise spot of its existence has ever been found,) we give the subjoined a place in our columns:

I noticed some weeks since, an invitation in your paper to a discussion upon this subject; but as nothing has as yet appeared, I venture to break the silence, and assert at the outset, that the cause is known, and the cure has been tested. I will be as concise as possible, make a few statements, and invite people everywhere to prove the truth of what I say. 1st. The cause is cobalt. No ore in its natural state has ever been discovered that is poison, but cobalt. I have never known man or beast to be affected where this ore is not found. 2nd. The cure is sulphuric acid. I have tried it myself, and seen it tried on both man and beast, and know it to be efficient.

The above is no hoax—it is the result of my own experience, and proves to my perfect satisfaction the truth of what I assert. Let others test and prove it likewise. C. W.

* * *

Rats.—When a house is infested by rats which refuse to nibble at toasted cheese and the usual baits, a few drops of the highly scented oil of rhodium, poured on the bottom of a cage-trap, will almost invariably attract it full of the "mischievous rodents" before morning. We have known this to be tried with most extraordinary success. Where a trap baited with all manner of edibles had failed to attract a single rat, the oil of rhodium caused it to be crowded night after night, until the house was cleared of the noisome visitors.

* * *

Rhubarb-plants.—Should be set out in hills four feet apart, in rows six feet wide, and one plant in each hill. The soil should be deep, dry, rich, and light. The roots strike deep down, and will rot if they come in contact with water.

* * *

The happiest man in the world is the one with just wealth enough to keep him in spirits, and just children enough to keep him industrious.

* * *

Every art is best taught by example; good deeds are productive of good friends.

# EDITORIAL.

**RALEIGH, JULY, 1858.**

☞ The Postage on the N. C. Planter is ½ cent on each No. if paid quarterly in advance; or 1 cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year, to any place in the United States.

## The State Fair.

Every Farmer, Horticulturist, Pomologist, Mechanic, Housewife and Maiden, who live at all accessible to Raleigh, should resolve to have some one or more articles on exhibition at the next State Fair—and also resolve to represent these articles, in person, on the Fair Grounds. Let it be a grand exhibition of the skill, industry and enterprise of our entire people—something that will truly reflect the character of the soil and climate of our State, and the energy and advancement of her people.

Upon the next State Fair, much depends, not only of the continuance of these annual convocations of those engaged in the industrial pursuits of life, but also of advancement and progress in those pursuits so essential to a civilized and refined state of society.—This occasion should be the Farmer's revel, especially. They should be present with horses, cattle, and every variety of home industry, to encourage each other in the glorious labor of tilling the earth and making it produce the largest yield *without empoverishing it.* It is marvellous when we think what human skill and human toil can accomplish, how it can indeed "make the wilderness to blossom as the rose," and bring out from the exhausted fields of broom sedge, the golden harvests of waving grain.

It has long been evident to every observing mind, that farming conducted on an improved plan, or with some regard to scientific principles, was the great desideratum which our State needed to give an impetus to her prosperity; to restrain the spirit of emigration, and build up a prosperity in our own midst which so many see in the far distant west. It is for this purpose—the diffusion of agricultural knowledge and a love of agricultural pursuits—that State and County Agricultural Societies have been organized, and Fairs instituted. To meet together and compare the results of months of toil and solicitude; to have a new energy created to rival the excellence of others; to enjoy—for there is to the Farmer no keener pleasure—the exhibition of ingenious and useful implements, mechanical and agricultural; of articles indicative of domestic economy, elegance and industry; of blooded animals, from the trim courser in his pride, to the priceless milch cow with extended udders; in a word to acquire and give a zest and relish for agricultural pursuits—these are some of the desirable objects and effects of these agricultural re-unions, which should commend them to all who wish or expect permanent improvement.

## A Little Appeal.

This is the seventh number of the North Carolina Planter. For more than six months now, it has been before the public, and it has received the most flattering encomiums as to its excellence as an Agricultural journal. But the *material* aid has not been correspondingly bestowed. Now, while empty compliments are gratifying enough, in their way, yet a whole ream of them will not do as much towards sustaining a work of the kind, as a one dollar bill, and a few hours devoted to procuring subscribers to it.

We are aware that the hardness of the times—the scarcity of money—has prevented many from subscribing for the Planter, who really desire and intend doing so. Very soon now, some articles of produce will put money into the pockets of our Farmers, and we hope each one will remember their friend, the NORTH CAROLINA PLANTER, and send on a dollar with a request to form its acquaintance; and if at the end of the year he will not say he has been reimbursed by its perusal ten-fold, we will return his money.—Don't wait to see an Agent—send on the money yourself without delay.

This is the month for the tax gatherings throughout the State, and furnishes an excellent opportunity to solicit subscribers.—May we not ask some friends, either voluntarily, or as paid Agents, to attend each of them, and present the claims of the Planter to their neighbors and fellow-citizens. By this means, the list of subscribers could at least be increased to a sufficient number to pay the expenses of publication. If we had one friend like W. A. Faison, Esq., of Sampson, (who has sent us near *seventy* subscribers,) in each county, we would soon be able to double the size of our work and embellish it with the finest engravings and illustrations.

☞ We ask every one of our present subscribers, to send us at least one new subscriber (and as many more as they can) during the month of July.

## The Crops.

Accounts from a limited portion of this State represent great destruction to the wheat and oat crops, by rust, the chinchbug, &c., but as a general thing, the reports indicate fine harvest in wheat and the winter oat—the spring oats being to some extent a failure.—The corn and cotton is small but looks well, and with favorable seasons will produce abundantly, should no disaster overtake them.

The Iredell Express says in that county and section, the wheat harvest will be very abundant. Letters from Montgomery say that though injured by the April frost and by the rust, the wheat crop will be a fair yield and of the finest quality. In Caswell, the rust and joint worm are represented as making sad havoc with the wheat. In Forsythe, though troubled with rust, the harvest will turn out better than was expected. A gentleman informs us that he had examined some fields in Orange supposed to be seriously injured by rust, but on extensive examination, found it confied chiefly to the leaf, doing little harm to stalk or head. Such is the testimony from other counties. In Franklin county, a letter writer says, the crops are very good. The wheat crop, in defiance of the rust, is said to be excellent. We heard a farmer say yesterday, that he believed there would be more wheat made in this county this year than ever had been before in one year.

And a letter from Pittsboro', says—The wheat crop in Chatham is fine; the rust which threatened it, seems to have given way, and it is a universal remark that every field of wheat in the county looks like a large yield. The oat crop is small, except the winter oats, and that having been sown in the fall, is now in height and fulness of ears equal almost to the wheat crop. There can be no doubt that it is a waste of land and seed to sow oats in the Spring season; the same land and the same seed put in during the month of October, will yield four-fold of a similar crop put into the ground in February and March.

## Letter from Patent Office Commissioner.

It will be seen by the annexed letter from J. HOLT, Esq., U. S. Patent office Commissioner, that some citizens of North Carolina deposited with him last year, a small quantity of a new kind of Wheat, which has proven to be of rare and superior quality—so much so that a large supply is now desired for general distribution. The name of the person leaving the wheat at the Patent Office, by some means is unknown, and this letter was sent to the Secretary of our State Agricultural Society, in the hope that the address of the individual may be ascertained. We hope the object may be accomplished—and to aid in effecting it, we here publish the letter.

From an examination of the few grains sent us in the letter, the Publisher of the N.

. Planter is of the opinion that it is the same kind of wheat he saw last summer, raised by several gentlemen in Yadkin and Davie counties. Would it not be well for specimens of the fine white wheat raised in that section, to be sent on, by letter, to Mr. Holt, so that he may institute a comparison? The specimen can be sent postage free. But here is the letter:

U. S. Patent Office,
June 17, 1858.

Sir: In November last, a small parcel of beautiful white wheat, represented to have been grown in North Carolina, was left at this office, without giving the name of the locality or of the individual who cultivated it. An enquiry was made through each of the members of Congress of your State, to ascertain from whom said wheat was obtained, but without success.

Enclosed I send you a few grains by which you may identify the wheat should it be found anywhere in your region. This Office would purchase two hundred bushels at a reasonable price. Should you know of any one who possesses a wheat which answers this description, you would confer a favor by requesting him to forward to this office by mail a sample, with the price and quantity which could be supplied.

Yours very respectfully,
J. HOLT,
Commissioner.

## County Agricultural Societies.

We should be pleased to receive from the officers and members of the various County Agricultural Associations, any articles they may desire to communicate to the public.—It will afford us pleasure to lay such articles before our readers. Ours being a work especially devoted to Agricultural interests, it is peculiarly appropriate it should be made the vehicle of communication to the farming interests of the State. Will some friend in each county please send us the address of the President and Secretary of his respective Agricultural Association?

☞ Subscribe for the Planter, it is a good companion on the farm.

☞ In many portions of the South and South-west, and in some sections of North Carolina and Virginia, they have been visited with great floods of rain doing great damage to crops, overflowing rivers and completely inundating and ruining extensive and valuable plantations. Millions of dollars of sugar and cotton have been swept away. In this immediate section we have had very little rain, causing gardens to be considerably parched. The corn crops, however, look unusually flourishing, and the wheat harvest is said to be very good.

## Agricultural Education.

It is remarkable how few people seem to consider it necessary that Farmers—Cultivators of the Soil—should be educated, prepared *by study*, for the intelligent and successful *practice* of their profession. If a man has a son whom he desires to dedicate to the profession of the Law, Medicine or Theology, it is at once conceded that he must have all the advantages of the best academies, colleges and universities, to prepare him for the studies of his profession, and then a course of reading under a competent instructor, to give him a knowledge of its principles and practice. But, unfortunately, too many seem to act as though they believed that the less education their sons have who are to be Farmers, the better they will succeed in the difficult and abstruse science of Agriculture. What a fatal delusion, not only to the development of the mighty interests attached to this greatest of all earthly pursuits, but also to the moral, social and intellectual advancement of society.

Farming is, in North Carolina and at the South generally, the means of producing—the basis of wealth and substantial comforts—the end to which the mass of our young men must bend their energies; and this fact gives a permanent importance to an education pointing specially to this pursuit. Our boys who are intended to be made farmers of, should have all the advantages of those designed for what are called "the learned professions," and a year or two's indoctrination into the *book-learning* and practical operations of their pursuit in life.

We contend, then, for the necessity for educating farmers as well as merely professional characters, for developing and expanding their minds and imbuing them with the generous and ennobling sentiments which adorn the classics and commend elegant scholarship to all; and at the same time furnishing them an education looking immediately to the excellence in farming. This is his life-time business, and it is the first characteristic of a good and useful citizen, to see him surpassing others in some honorable, industrious employment. The merchant, who by close attention to business accumulates a fortune; the barrister who by hard study has mastered the complexities of the law ; the physician who has acquired a reputation for skill ; the farmer who has brought science to the aid of practical sense—these are the useful men in any community. And it is to amplify this latter class, to bring science into immediate connection with skill, to inculcate true ideas of economy as distinguished from niggardness—to teach the relative duties of master and servant, to familiarize the farmer so far with the laws of health that he may guard against local diseases ; to accustom him to order and regularity—to make him love the virtuous independence, the hardy joys, the innocent recreations of rural life—to make Home, which has been beautifully and truthfully called " the garden of the affections," more cozy, comfortable and attractive, that we propose a system of Agricultural education. The scope of such an education would be so much *book-learning* as could be practically illustrated on the farm, and applied to the details of life.

We most cordially invite Farmers when visiting the city to call at our office. We desire to keep our readers informed upon all agricultural topics, and to a certain extent we have to depend upon our friends for such information.

☞ Upon the Members of the State Agricultural Society, we think we have a strong claim for support, in the publication of the North Carolina Planter. The interests of the two are intimately blended. If *our* enterprise succeeds, it will necessarily contribute greatly to the advancement of the Society. But how many of its members are subscribers to the Planter? Not half. Even some of the most enterprising have failed to send on even their individual subscription to it, much less cheered us by sending lists of other subscribers also. We believe this to be the result of inadvertence, instead of a want of disposition to patronize tke work; but still the effect is the same. We hope they will atone for past remissness by sending us good lists of subscribers forthwith, and thus give us an assurance of their sympathy and co-operation in furnishing North Carolina Farmers with a good home journal.

*For the N. C. Planter.*

Eds. N. C. Planter:—For some time past, I have been making some inquiry among farmers and mechanics, to ascertain which is the proper season for cutting timber to secure its greatest strength and durability; but finding considerable diversity of opinion, I have not as yet been able to fully satisfy myself which is the right time. So far I have not seen anything in the Planter relative to the subject, except what is said by your correspondent, T. S. W. Mott, in the May No. In his communication recommending from the middle of July to the middle of September as being the best time for clearing up new ground, he says that " the objection that would probably be urged against clearing land at the above named time, would be the sacrifice of rail timber, because rails cut at that season soon decay and are worthless." He does not state which is the proper time to insure durability. This opinion, however, of your correspondent is directly opposed to that of some practical farmers of my own acquaintance. I also have the Patent Office Agricultural Report for 1849–'50 before me, and on page 367 there is an article by William Painter directly to the point; in which he states as the result of over forty years experience, that from the middle of July to the last of August (instead of being as Mr. Mott thinks a bad time) is the very best season for cutting rail timber to insure its durability; saying that fencing timber cut at that time will last more than twice as long as when cut in the winter or spring. So you see that one or the other of the gentlemen referred to above must be wrong. Which is it? As the subject is one of importance to every farmer and mechanic, I should like very much to see an article in the next number of the Planter by the Editors or any of its readers who may be posted up on that point. I have considerable fencing timber that I wish to cut before a great while, and would like to know at which season to cut, to make my rails last the longest. S. W.

We are aware of the difficulty of answering our Correspondent's interrogatory satisfactorily. There is a great variety of opinions as to the time of cutting timber, with a view to retaining its preserving qualities all professing to be governed by *experience* in the premises. Our own experience and opinion is in favor of July and August, as the best season for cutting rail timber, with a view to strength and durability. The sap of the tree is then elaborated into wood, and consequently the wood is stronger and dryer. Whoever has tried peeling saw logs in summer, has found them easier to handle the next winter, and the timber much less liable to rot. Timber cut and peeled in July or August will never powder post; and it is a well known fact, that experienced ship-builders all declare that August is the best time to cut oak for ship building; and strength and durability with them is the great consideration.

*Per Contra.*—We give, however, the views of others, with their reasons, from which our Correspondent can form his own conclusions:

John Johnson, of Mt. Washington, Ohio, writes to the Genesee Farmer, that about the first of February is the best time to cut timber, as at this season the timber is free from sap; and says: "I have taken up posts cut at this season, which had been set twenty years, and they were perfectly sound."

We find the following in the June No. of the American Agriculturist, which is not irrelavant to the subject under discussion:

CUTTING TIMBER FOR POSTS.—E. Hames, of N. J., gives us the details of an experiment in setting posts. Those cut in June and set green lasted fifteen years and over. Those set dry lasted only five. The time in which the dry posts were cut is not stated. It was probably in Spring before the leaves started. We regard mid-Summer, as the best time, to cut timber for posts. The bottoms should be charred upon the outside.—They should stand in the ground the top end downwards. The charring should extend a little above the surface of the ground.

## The Grasses.

We esteem ourselves very fortunate in being able to procure from Prof. EMMONS, State Geologist, &c., a series of articles for the North Carolina Planter, upon the subject of Grasses—a subject that is now eliciting much inquiry and investigation in our State. We give below the first of the series, and it is to be followed in each succeeding number, for several months, with others. The series will embrace some ten or twelve kinds of Grass, with an illustrative engraving of each—a description of their characters, qualities, adaptation to the various soils, climates, &c., of North Carolina, and will be of great utility to the farming interests of the State—coming as they do from one so well qualified to do full justice to the important subject.

## The Grasses and their Functions.

BY PROF. E. EMMONS.

The Grasses perform many important functions. They have been selected from all other classes of plants for a covering to the earth. Their color is agreeable to the eye; the earth is protected by the interlacing of their roots; the loose soil is thereby prevented from wasting, and gullies never form where grass has spread its carpet of green.

But to the Grasses we look for food of the beast, as the largest of the cereals sustain the millions of the human race. The seed of all grasses are nutritious; but the smallest are only fit for the sustenance of birds and insects. Those which are denominated corn, are especially cultivated for their albuminous matters for the use of man. But we propose now to consider the grasses proper; those whose nutriment is contained in the herbage of the plant.

There are two classes of bodies which minister to the wants of animals in the grasses: The first, which is usually regarded as the most important, is termed the *albuminous matter*. It is represented by the contents of an egg, especially its white; the gluten of wheat, the tenacious part obtained by beating and washing, is a good representative also of this matter. This matter supplies the waste of the system. It is strictly speaking the nutritive. The other matter imparts to the system its heat, or in other words, it is a heat generating matter. Sugar, oil or fat, starch and its allies, are examples of this form of matter. Now the grasses contain both kinds, but in different proportions.—Some are richer in meat producing matter; others in their heat generating ones. The latter, however, always predominate. In addition to the foregoing, it may be said that there are matters which are neutral in their effects, for example, the ordinary form of woody fibre, a part of which is excrementitious: still woody fibre, or the neutral matters, meaning those which are neither meat producing or heat generating ones, are not useless in the system. It appears necessary that the food of cattle, sheep and horses, the whole tribe of ruminats and the vegetable feeders, require that the food should be bulky; that it should in a measure distend the parieties of the digestive organs. There is another important property resulting from the use of grass and hay for food; it preserves the masticating organs in health. Feed an animal upon slops and soft food which does not require to be chewed, and the teeth become loose and unfit for a time to perform their functions. The cows which are fed exclusively upon Brewer's grain, and the refuse of the distillery, suffer exceedingly from the condition of their teeth. There, it is true, more than one cause is at work in this instance, which generates disease, and by which the hoofs become loosened, and the tails fall off.

But, to return to the grasses; it would seem they are the natural food of cattle and sheep. It is upon them that they acquire the best condition, are the most healthy, and furnish the best butter, the best cheese, and the best or most juicy meat. We speak of the grasses as a class, for they contain a great variety of kinds, in consequence of which, thrift is promoted. The different parts of a field furnish different kinds of grass. Cattle seek variety, and hence are enabled to gratify an instinct which is no doubt promotive of health. The farmer then, who is enlightened and humane, will furnish variety to his horses and cattle. No doubt there are weeds among the grass and hay which we regard as of no account, which to them is medicinal. Horses frequently eat May weed with avidity; it supplies or satisfies a feeling of want. It is not eaten because it is nutritive.

The direct objects which are sought to be obtained by the cultivation of grasses, are the production of beef, mutton, milk, butter and cheese, that is a variety of food for man, best in its kind and abundant in quantity.—The indirect benefits arising from the cultivation of grasses, are the furnishing a source of fertilizers, and preserving the soil in a good condition. If cattle are left to roam at large in forests and swamps, the former object is certainly sacrificed. There is a deception in the meaning of the terms, a fine range—a great range. The greater the range the greater the evil. How often have we heard the remark from those who rely upon great ranges, that they lost from six to ten head of fine cattle in a season. These large ranges are too great temptations to the idle and dissolute. Lands which are fenced supply more food and much greater safety, than the interminable swamp, or the sides of the Blue Ridge.

In the cultivation of grasses, different objects are had in view. Most grasses are desired for their nutritive properties, but some fulfil other functions. They may be required for their ability to grow in sand when they are required to confine it in place. Some make a good turf for the meadow. That the face of the earth may all be clothed in verdure and the marsh and upland produce something useful to the living, this family of plants are specially adapted. Some are truly swamp grasses, coarse and mostly unpalatable when mature. Others grow upon the moist meadow, and others still upon the dry hill side. The two last are the most important.

Technically, grasses are divided into two great families :—the GRAMINACEÆ, which comprehends the best and most palatable; and the CYPERACEÆ, which comprehends the coarse ones that grow in swamps and marshes. We need not generally look for the fine red top, timothy or orchard grass in swamps. But a moist atmosphere favors the development and production of a juicy tissue, while a dry atmosphere favors a dense wiry tissue which may contain too much woody fibre to be relished by cattle.

The great variety in the constitution of grasses, secures a succession of kinds for the season. The early spring has its kind, and a succession follows till late in autumn. In sowing grass seed, therefore, it is a matter of great importance to mix such as succeed each other in their proper season. The winter is thereby shortened on the spring as well as upon its autumnal side.

The writer proposes now, to state the properties of such grasses as are worthy of cultivation in this climate; the soil and exposure which they require, and the comparative value which they hold in the family to which they belong. But as this article is sufficiently long, he will defer further remarks till next number of the N. C. Planter.

* * *

CURE FOR HYDROPHOBIA.—A man was cured of hydrophobia, in Italy, lately, by swallowing vinegar in mistake for a medical potion. A physician at Padua heard of this, and tried the remedy on a patient. He gave him a pint of vinegar in the morning, another at noon, and a third at sunset, which cured him.

## Composted Muck and Ashes.

Ashes are well known to be a valuable fertilizer for all dry soils; and muck is generally found beneficial to soils deficient in vegetable matter. The latter is always so, unless imperfectly decomposed, or saturated with acids unfavorable to vegetation. Both articles are cheap and easily obtained—ashes being worth not more than about ten cents per bushel; while muck can be had on most farms for the mere trouble of digging. The two combined, form a fertilizer of high value, as we shall proceed to show.

One of the best practical writers on this subject says: "Next to compost of muck and barn manures, a mixture of *muck and ashes* is most common, and by experienced persons is considered the most profitable.—It is certainly one of the most convenient mixtures, as the ashes may be transported over a considerable distance without incurring unprofitable expense. The farmer, when ashes are applied, finds his plants vigorous, of a fine, healthy color, growing permanently throughout the season, and producing highly perfected and abundant crops; so that their value *to be used with muck*, is often estimated as high as 50 cents a bushel in an unleached state."

Another writer says :—" To bring out the ammonia, the muck must be fermented—which may be effected by the use of alkalies or fresh stable manures. From fifteen to twenty bushels of ashes, or ninety pounds of potash are required to a ton of peat." Prof. Flint, of Mass., relates of a farmer in Watertown, Mass., that he sells the dung of his cattle, and uses instead, leached ashes and muck—one part of the former to three of the latter—thus keeping his farm in a high state of fertility. He digs his muck in the fall and mixes the ashes with it in the spring, shoveling it over three or four times.

We have not the least doubt that composted muck and ashes is of as much value, load for load, as the generality of barn yard manure, and would not hesitate to apply it for the production of any crop. Prof. Dana says that "the power of producing alkaline action on the insoluble *geine*, is alone wanting to make peat as good as cow-dung." Any alkali will do this, and ashes answer well this purpose. Half dried muck heaped with ashes for several weeks, will decompose the same pretty thoroughly; a single turning will complete the work unless the muck be of the coarsest character.

We have not spoken of other forms of muck compost, our present purpose being to urge the use of muck and ashes as a manure.

## Eurytoma Hordei, or the Joint Worm.

The Salisbury Watchman says, we are indebted to an intelligent friend for bringing to our notice the existence of this most formidable evil in the present wheat crop. If you will take a stalk of wheat and split it open with a knife blade near the second and third joints from the root, you will find a yellowish glossy worm about the fourth of an inch in length, which is manifestly doing great injury to the wheat. Our friend says that he has been watching its progress for a month past. At first there were but few, but these were transformed into a small four winged fly and cut their way out through the side of the stalk. All the wheat that was thus early attacked was killed to the very root, which in many instances will account for the sparseness of the crop. The worm or maggot has multiplied very rapidly of late, so that in this vicinity scarcely a stalk can be found without several. They are manifestly doing much injury to the wheat crop, and it is much to be feared that late wheat will be cut very short by them.

An account will be found of this phenomenon in the Patent Office (Agricultural) Report for the year 1854, under the name of the Joint-Worm.

TOBACCO PLANTERS should bear in mind that it costs as much freight in shipping a small hogshead of tobacco as a large one.—Hence, a large one will bring more per cwt. on sale than a small one, as it costs double the money to ship two thousand pounds of tobacco, if it is in two hogsheads of one thousand pounds each, as it would were it all contained in one.

## Do Potatoes mix in the Hill?

One would suppose that this question had been settled long ago, yet it continues to be asked. We repeat, therefore, that they do not and *cannot* mix in the hill. Why not? Because it is an invariable law of nature that one variety cannot be crossed with another except through the flower and fruit. All plants of the same family can be hybridized with each other, if they blossom at the same time. This crossing often takes place naturally, i. e., without the use of any artificial means. The wind often blows the pollen from the stamens of one plant-flower upon the pistils of another, and an intermixture ensues. This is also done by bees and insects, and it may be done by the hand of man. Potatoes can be "mixed" in this way. But remember that the mixing does not take place between the tubers under ground, but in the blossoms and subsequent seed balls on the top of the plant. Plant two kinds of potatoes in adjoining rows, and if they blossom at the same time, the pollen of one flower will undoubtedly be carried to the pistils of another. In the Fall, save the seed balls and plant them and your potatoes will be a "mixed" variety. But if you continue to plant the tuber (the potato itself,) you will get no change of variety.

It is in this way that corn, melons, cucumbers and squashes become mixed with other varieties. The hybridization goes on through the flowers, and appears in the seed, and not in the root.

## Prolific Wheat.

The Greensboro' Times says, Mr. John Kirkpatrick, near High Point, in Guilford county, has sent to that office a bunch of wheat stubble, numbering one hundred and twenty-one, all the product of one grain.—The stalks were large and well developed with good heads. Say they averaged fifty grains to the head, it would be a yield of six thousand bushels to one sown. Can any man in any State beat this?

## The Artificial Manure Question.

At a meeting of the Oxford Farmers's Club, on Wednesday, Jan. 14, the following resolution, proposed by Mr. Mein, and seconded by Mr. Coggins, was carried unanimously: "That this Club considers the use of artificial manure still too much limited; that Peruvian guano, as a standard, is the best top-dressing for corn crops; farm-yard manure, guano, nitrate of soda, and bone-dust for grass land; that mixed manures are the best for root crops; and that without a liberal use of artificial manure the present extent of land in this country could not be kept in cultivation, as there is nothing that has tended more to assist high farming than the introduction of artificial manure; and, finally, that this Club does not consider that the decay of the root crop is attributable to the lavish application of manures."

◆

Specimens of Wheat and Oats.—The Editor of the Salisbury Watchman says—Mr. John C. Miller left at our office, on Tuesday last, a bunch of wheat, drawn up by the roots, consisting of 103 stalks, with bearing heads on each. They were all the product of one grain. The increase cannot be less than 2000. He also left a bunch of oats consisting of 110 stalks, the product of one grain, showing an increase of between four and five thousand.

Mr. Miller's crops of wheat and oats are much better than common, and it is due to him to say that it is the result of industry and skill. His neighbors call him a first rate farmer, which is a name, by-the-way, any man might be proud of.

◆

## Hen-Manure.

More than one correspondent has lately asked: How shall I prepare hen-manure for use, what crops does it most benefit, and how and when should it be applied? To which we reply: Have on hand a lot of old barrels, and shovel the hen-manure into them, mixing it as you go, with twice its bulk of loam, muck or sand. It is an excellent plan to scatter fresh dirt or plaster under the hen roosts every few days. This compost thoroughly mixed together, may be applied by the single handful to every hill of corn. Forty bushels of the mixture will thoroughly manure an acre. It may be applied not only to corn, but also to cucumbers, melons, squashes, grape-vines, and indeed to everything growing in a garden. It is quite as active a fertilizer, as Peruvian Guano.

◆

## Points of a Good Horse.

In purchasing a good horse, sight, wind, feet and limbs must be the uppermost objects of inquiry; for nine horses out of ten are defective in one of these particulars. First, then, examine his eyes, and do this before he comes out of the stable; see that they are perfectly clear and transparent, and that the pupils or apples of the eye are exactly alike in size and color. Next, examine his pipes; if good and sound, on being nipped in the gullet, he will utter a sound like that from a bellows; but if his lungs are touched, and he is broken winded, he will give vent to a dry, husky sort of cough; look to his limbs also, and pressing your hands down his legs, if you find any unnatural protuberance, or puffness, or if, feeling first one leg then the other, you discover any difference between them, disease, more or less, is present; he may not be lame, but he is not clean upon his legs. If he is broad and full between the eyes, he may be depended on as a horse of good sense, and capable of being trained to almost anything. If you want a gentle horse, get one with more or less white upon him; many suppose that the parti-colored horses belonging to circusses, shows, etc., are selected for their oddity; but it is on account of their docility and gentleness; in fact, the more kindly you treat horses, the better you will be treated by them in return.

*Spirit of the Times.*

◆

Texas Oat Grass, is a new variety of grass introduced into some of the Southern States, so named from its resemblance to Oats. It is spoken of as a very superior grass.

## Delicious Fruits.

We have been the recipients of several fine presents recently, from our Horticultural Editor, S. W. Westbrook, Esq., in the way of delicious Fruits. The odorous Apples, delightful Cherries, rare and superior varieties, luscious Apricots, &c., such as our eyes or palates never feasted on before—all grown in his extensive Gardens near Greensboro'. We would indulge in a sort of glorification over these highly prized gifts, but we fear our appreciation and enthusiasm would subject us to the charge of extravagance, however moderate and just our laudations might be. We will only say therefore, go and see for yourselves, all who doubt, and be convinced.

Persons in want of Fruit Trees, Grape Cuttings, Strawberry Plants, or any thing else in the Fruit line, will do well to address in time, S. W. Westbrook, & Co., Greensboro', N. C.

Metal Tips to Boots and Shoes.—The saving in shoe leather which the small metallic tip on the toe of a boot or shoe effects is very great, and the invention is one of practical utility. Children are remarkably fond of kicking out the toes of their little shoes, thus rendering them useless and making it necessary that another pair should be procured, although no other part of the former pair is injured. By the use of these tips, which may be made of silver, copper, iron or any other malleable metal, the boot or shoe may be worn until it is really "done up," and they are so secured that so long as any portion of the sole remains, the tip will be held fast. They do not increase the weight of the shoe above half an ounce or an ounce. It is the invention of G. A. Mitchell, of Turner, Me., and was patented on the 5th of January last. Economically speaking, there is no doubt of its value, as one pair of boots or shoes—men's, ladies', or children's—can be made to last nearly twice the time they would without the tips.

## The Time to Cut Wheat.

This has been made a matter of careful experiment in England, and much more depends upon it than is generally supposed.

From a very careful series of experiments made in England, in 1840-41, by Mr. John Hanman, of Yorkshire, with a view of determining the proper period of reaping wheat, it was decided that the best time for performing the operation is, when it is in a "raw" state, or when the straw, as seen from a distance, appears green, but, closely examined, is found to be approximating to yellow, and the grain itself, being separated from the chaff, is pulpy and soft, but not in the milky stage. This gentleman has shown that, at least six dollars per acre are lost by allowing the wheat to become ripe before it is cut, and; that at the same time, its quality is not so good.

The chief advantages derived from this method, are stated to be a greater weight of grain to a given space of ground, which produces more flour, of a superior quality; the straw contains more nutritive matter, and is better relished by animals: and there is a better opportunity of securing the crop, and a saving in so doing, as there is less waste in moving or reaping the wheat by the dropping out of the seed.

It will be seen in this matter, how much a farmer's success depends upon an accurate knowledge of his business. Even in so small an item as the cutting of grain, the owner of fifty acres would lose three hundred dollars, by harvesting a few days too late. There are many other farm operations in which accurate knowledge is quite as important. Is it any wonder that so many of our farmers do not make money when there are a hundred holes in their pockets, through which the money is dripping out in dollars, dimes, and cents.—The whole year is a scene of prodigal waste, for want of a little knowledge. Wood is wasted for want of a good stove, or a tight house. Ashes are wasted for want of a dry place to put them. Fodder is wasted for want of a tight barn to shelter cattle in the winter nights. Manures are wasted for want of a barn cellar, and sheds, and absorbents. Labor is wasted for want of manure to produce maximum crops. Is it strange that with all these leaks, that the farmer's till does not fill up faster?—*Homestead.*

☞ It is said that scraps of leather burned under a plum tree when in full bloom, so that the smoke will go into the tree, will kill the curculio insect which destroys the fruit.

# Horticulture.

**S. W. WESTBROOK, EDITOR.**

ERRATUM:—In June number, on page 194, hand column, top line, please read from to ten feet in diameter.

## FRUIT CULTURE:

### e Culpable neglect of, in the Southern States.

here is not a family in all our sunny th,(unless it is unfavorably situated,) but ht raise an abundance of Fruit, sufficient upply the family throughout the whole r,and have a surplus to sell, if they would y bestow a small amount of time in the paration of the land, the planting and ring of the trees. But it is very much to regretted, that there are so many persons t do not regard the culture of fruit as an ortant item in domestic economy, not even taking into consideration the pleasure luxury of having a supply of each kind ruit in their respective seasons which is ulated to make home attractive and pleas-

We have often been pained, while passing ough the country, to see a splendid edi- reared up in the middle of a field, and no hard, shade tree or shrubbery to mark place; nothing but the buildings them- es, because the proprietor has been gov- ed by a false taste, or is such a niggard, t he cannot spare the small amount of d necessary to add those indipensable and fitable attractions to his homestead.

ur landed proprietors have seen immense es of brick and mortar and other struc- es, that would do some credit to the best hitectural taste; but, unfortunately, they e never seen the fine display of delicious its that have been recently introduced this country, and those that have been ginated in our own by careful cultivators. They have never seen the delicious, melting Strawberry, measuring two inches in diameter; or those beautiful Cherries, such as the Mayduke, Black Tartarian, Elton, American Heart, Bowyers Early, Napoleon, Flesh Colored, and Holland Bigarean's, and many others of the highest excellence and most beautiful colors, and often as large as the Chickasaw, or what is called the old field plum, and growing on beautiful large trees that would be an ornament to any landscape, if tastefully arranged; and the Apricot, that beautiful, ruddy cheeked sister of the peach, differing but little, and only second to her in beauty and flavor, ripening in succession after the cherries, and making the link in the circle of fruits complete, between the cherry and the queen of fruits, the Peach. And who can speak in too high terms of her, and her beautiful progeny, all dressed in velvet clothing of the most beautiful tints and shades. And the Plum! The bloom-dusted Plum! which ripens in season with the Peach, and occupies a high scale of excellence in the list of fruits; some white, others yellow, with red specks, some blue, and others a beautiful salmon, of various forms and sizes, and exceedingly delicious, enough so to make our reader forget the old Chickasaw plum tbicket (his only idea of a plum) when he and the pretty little Misses used to hie away through field aud glen, to gather the Chickasaw plum. And here we will introduce another sister of the Peach, Miss Nectarine, arriving at maturity at the same time; the outline of her drapery is more delicate and smooth, and she is not surpassed in beauty and excellence by either of her sisters. We will also observe that she is a great favorite among the ladies, much more so than among the gentlemen, and we do not know why it is so, unless it is on account of her vinous nectar which is very delicate and delicious, or that the ladies' mouths are more delicately put up, and their taste more refined.

But here we introduce another character, which is equally popular with both sexes where his acquaintance has been made, which we shall call the king of fruits—we mean the Pear! And the lamented Downing has said that the pear is undeniably the favorite fruit of modern times and modern cultivators. It is to be lamented that so few persons have formed his acquaintance in a high state of excellence, the only idea among the uninformed being that of the common choke pear of the country, or some few others of indifferent quality, well calculated to make an unfavorable impression, such as cannot be easily eradicated. But, however, we must claim some attention from our readers, while we assist them in extending their circle of acquaintance in this numerous family, which is, like all other families, some very good, others indifferent, and others very bad. If our taste has been cultivated, it is not difficult to arrive at correct conclusions; If we have ever tasted a fine Bloodgood, Dearbon Seedling, White Doyenne, Lawrence, Sickel Bartlet, Louise Bonne of Jersey, Vicar of Winkfield, Winter Nellis, Buerre de Aremberg, Easter Beurre, Flemish Beauty, Paradise de Automne, Morgan, and Glout Morcean, and all that fine class of pears, then we are able to appreciate the great improvement in pear culture; and more so when we recollect that it is our privilege to have an abundance of this delicious fruit, *in a green state*, throughout the entire year.

And now we have a Queen and a King—and all that is lacking, as we are a republican people, is a President to preside over this extensive collection of natives and foreigners, for which purpose we shall put the Apple at the head of the list, on account of the many reminisences connected with his history, his sterling qualities and his favorable and extensive acquaintance in almost every country. We need not remind our readers of the excellencies of the old standard members of this family, but to be brief in the discussion of the merits of this fruit, the keeping qualities and the many ways that the apple may be used, we would only say that many new and excellent varieties have been added far superior in flavor, beauty and keeping qualities.

And now our circle of fruit is complete, embracing the whole year—each fruit in its respective season—without making reference to the smaller class of fruits, such as Raspberries, Gooseberries, Currants, the finer class of Blackberries, &c. And we close this article by saying that we have not written it for the intelligent amateur, or those that appreciate the pleasure and profit of fruit culture, but especially for that class of land owners that will not believe anything that th
may hear in reference to any kind of i
provement, either in farming, fruit cult
or anything else that happens to come
contact with their fogy notions, the leg
mate result of the erroneous practice of g
erations. But we have no hope whate
that such will ever be profited by thi
written. Before they can be convinced,
least three of their senses must receive
electric shock of influence upon the subje
before an impression can be made upon th
minds. They must see, they must feel,
they must taste; and the consequence is, t
that class of people (being more numer
than any other) establish fogyish fashi
and customs which militate very much agai
the prosperity of the country, and their o
individual interests.

* * *

*For the N. C. Planter*

**Editors N. C. Planter**:—I promised
send your journal a chapter on Planting
Trees, but as the proper time for planting
now passed, will defer doing so, and inste
say something about the proper shape
give a tree when planted.

June is the most suitable month in wh
to frame trees of all kinds, from the fact t
it is then the sap is in its fullest flow, a
the wounded wood heals before decay ta
place.

The shape of an Apple-tree should be u
brella, or, when young, the top should spre
out in the shape of a funnel. This is d
by shortening the young tree to the pro
height to start its top, and leaving three b
or branches—never more than four—a
these so equidistant from each other rou
the young trunk that the tree may hav
proper balance upon its roots.

The first training of these young branc
should be as nearly horizontal as possible,
as to give the top a good wide spread, a
then let them take their upward directio
taking care to trim away from these all
branches that point inward, to the height
6 or 7 feet from where the top commen
and then let them alone that they may gr
and meet. Thus you have formed a hol
apartment in the top of your tree, in whi

can stand and with comfort gather your
t, and will have but little pruning to do
r this, save to free your tree of water
outs and suckers. There are, however,
w varieties of Apple-trees of such aspi-
g habits that if let alone will run up too
l. These should have their tops shortened
wn, and kept in due bounds. As regards
proper distance from the ground that an
ple-tree should throw out its horizontal
nches and form its top, orchardists widely
fer. Our own experience satisfies us, that
height should be sufficient to admit of a
rse and plow passing under without the
o of the hames raking the branches, or
ur plow-boys' heads getting tangled in
em; else, if you chance to be hard by and
observed, you may hear certain interjec-
ry expletives that may raise a fear that you
o not bringing up your boys in the way
ey should go.

In other respects, the lower and more
reading the top of a tree is, the better; so
to expose their organs of respiration to
oth light and air.

S. McDOWELL.

Franklin, N. C., June 1858.

☞ We are much obliged to our intelli-
ent Correspondent for the following in-
tructive article on the Cabbage. More per-
ons fail to raise this vegetable, worthy of the
ame, than almost any other. It is easy
nough to rear coleworts (or *collards*, as they
re commonly pronounced) but firm, white
abbage, for fall and winter use, ten fail
where one succeeds. Why is this? Is it
attributable to the seed, the soil, the manure used, or the cultivation? Can our friend P. give us information? Again: What will kill Lice on Cabbage? We have tried tobacco juice, snuff, strong red pepper tea, &c., without the least effect. Our early Cabbage are being ruined by them. How shall we destroy them? Will some one tell us?

*For the N. C. Planter.*

## Cabbages.

Messrs. Editors: In the June No. of the Planter, is a short article on Cabbages, in which this expression is found: "*Potash is its special food.*" This I think is an error, though it is easy to see how a person may readily fall into the error. Ashes are well known to be an excellent manure for Cabbages, and this fact would lead many to suppose that potash was the special food of the Cabbage species. We must recollect, however, that an article may be a good manure, without containing the special food of the plant to be grown. Many manures are valuable on account of their mechanical action upon the soil, in promoting that disintegration of the soil which renders it fit to be used as food for plants. This is often the case with ashes and lime. The mill-stones grind our corn for us, but we do not eat the mill-stones, but the meal: so lime and ashes often prepare the food for the plants, without becoming food. For some plants, as the potatoe, potash is regarded a special food, but it is very doubtful about its being the *special* food of the cabbage varieties.

The Cabbage is well known to be a highly nitrogenized plant, and those manures are best adapted to its growth, which abound in nitrogen. This is also farther proven in the fact, that cabbages contribute largely to the muscular system and but little to the fat of animals that consume them; thus showing that azote is one of the chief constituents of the cabbage. Sulphur, phosphorous and soda also abound, with traces of potash, in all species of cabbage. But if potash was the *special* food of the cabbage, of course an analysis would show a superabundance of potash, which is not the case according to the books. The largest cabbages I have ever seen, or heard of being raised in North Carolina, were raised by manuring in the drill, with a preparation of swamp mud and stable manure, on land that had previously been sprinkled with ashes. If I were to write down any one article as a special food for cabbages, I should write Amonia, and then, to raise the plant to perfection, I should seek those manures which abound in this article, as well rotted stable manure, guano, &c. At the same time I should not forget that, as soda is required, salt will be useful; as phosphorous is required, old bones or bone dust will be useful; and as potash will be required, ashes will be useful.

It is always a good rule to observe in manuring land for any purpose, that those are the best manures which contain the greatest variety of substances, and prepare our heaps accordingly. If we were to proceed upon the principle that potash was the special food of the cabbage. and fill our trenches with strong ashes, we should find our plants soon cauterized at the root and dead at the top.

Yours truly, P.

Clinton, June 14th, 1858.

## Tobacco and the Plum Curculio.

Messrs. Editors:—Being at the house of a friend, in June last, I was surprised at seeing his plum trees nearly breaking down with fruit. He informed me that his remedy was, to take an old tin basin, make a few holes around the sides, near the bottom, and have the basin secured to the end of a pole long enough to pass the dish through all the parts of the tree. He then takes some fire and a small quantity of any old refuse tobacco, and puts in the dish; this smoking, he takes the time early in the morning, while the dew is on, and passes the smoking dish through all the parts of the trees. It should be commenced on the first formation of the fruit, and continued six or eight weeks—the oftener it is done, the more sure you will be of saving all your plums: he only smoked his trees twice a week. He says the first few times he could see the insects leaving in a swarm, and soon there were but few to be seen. He says that by smoking while the dew is on, the smell of tobacco will be longer retained in the trees, and that for his eight or ten large trees it would take him about an hour each time, and that his expense for tobacco was three York shillings. To prove that the insects did not like the fumes of toboacco, his neighbors, only a few rods distant, and who would not take so much trouble, were rewarded by not saving a plum. It would have done you and your many thousands of subscribers good, to have seen these trees, loaded with the delicious fruit, and to know that with a little trouble, and a very little expense, this excellent fruit may be preserved. R.

Clean up your Door Yards.—Clean up the door yards, and rake into a pile the saw dust, chips, &c., that have accumulated during the winter. If you had some corner in a shed and there place it under cover, and get the women to throw all the waste water from the house upon it, by the Fall it will make a manure pile as rich as guano, without any outlay, except of a little good sense. If the pile is not large enough to absorb all the water from the house, add a load of peatymuck or any old turf. In this way a nuisance is turned into money, for nothing looks more slovenly than an untidy door-yard.

Remedy for the Striped Bug.—Havi but few boards at hand suitable for maki frames but plenty of old bricks, I took wheelbarrow load of the latter, and sto four or five of them on edge around ea hill of melons, etc., as soon as the your plants made their appearance; and in t days' trial I have not found a bug inside these pens, while some plants outside we entirely devoured by them. The bricks al promote the growth of the young plants, protecting from winds and giving out heat night absorbed during the day.—*Exchan*

Selecting Trees.—In making your sele tion, see how much new wood was made la season in the nursery, that the bark is smoo and clean; and especially that the main roo are furnished with abundance of fibre growing in masses, showing that the tr has been subject to root pruning in its pa cultivation. One such tree is worth a doze thriftless articles, covered with scale bug and deprived of half their roots.

*Homestead.*

## Caution to Parents.

A little child about six years old, of Joh Doomer, who resides near the Augusta (Va Springs, came to its death on Saturday la by drinking laudanum from a vial which ha been left in an exposed situation. Medic aid was called, but too late to be of service— the deadly poison had so infused itself int the system of the child that it "slept the slee which knows no waking." Parents cann be too cautious in placing such dangerou drugs out of the reach of their children.

☞ California is determined to excee every other section of the Union in the siz of its fruits, &c. At the last annual exhibition they record a Duchesse Pear, weighin *two and three-quarter pounds*, a beet weighin one hundred and three pounds, and a cabbag fifty pounds.

A Very Strong Water-Proof Glue.— Take common glue and after preparing it i the usual manner for using, add graduall about one.eighth in quantity of boiled lin seed oil, stirring it until it becomes thoroughl mixed.

Keep a bag for old pieces of tape and strings, and a bag or box for old buttons.

# For the Ladies.

## FLORICULTURE.

**Greenhouse Plants** should receive particular care and attention, and be placed out doors; all dead leaves must be picked off, weeds pulled from out the pots, the bottoms examined to see if the drainage is clear, as that is a very important item. Where the soil has been washed out of the pot by watering, they should be filled up again. Be careful they do not stand on the ground, but place them on a board or pieces of rock, so the water can get away. Never use pans under the pots, as the water standing in them kills the bottom roots of the plants; they may be frequently syringed or sprinkled overhead, as it will greatly assist them in hot weather, doing so when the sun is not on them.

**Roses.**—The perpetuals have now a beautiful supply of flowers on them; watch closely for the little green worms or caterpillars, as they eat and ruin the young buds. Manure water may be applied with benefit twice per week, taking care it be not too strong. Keep them neatly tied to stakes painted green. In tying them, be careful to keep the plant in its proper shape.

**Dahlias.**—This is a beautiful though neglected plant in this State. New varieties are constantly being added. No garden is complete without them. They bloom principally at a season when we have little else to make the garden cheerful.

**Hollyhocks.**—This is a splendid plant when cultivated in masses; the new kinds are especially worthy of cultivation, the flowers being the shape of a half globe, beautifully filled up in the centre.

**Antherinum Tricolor.**—This is one of the most beautiful of our hardy plants. In the winter it is perfectly green, and makes a handsome bush; the flowers are white and yellow, are very strong and durable. The plant grows about two feet high and of good shape.

**Annuals.**—Successions of these should be sown; those growing, plentifully supplied with water in dry weather. Manure water may be applied with benefit twice per week, but be careful it is not too strong.

**Herbaceous Plants.**—As these go out of bloom, the stems may be cut down and the plant put what is called to rest. This is a beautiful class of plants, but very much neglected. A garden may be kept perfectly gay with nothing but herbaceous plants, properly arranged as to their time of blooming and colors.

WM. H. HAMILTON, Florist.

I trust the excellent article by the lady "Rosa" will be followed by others as good. I trust other ladies will also join in; they can help the cause admirably by doing so.

W. H. H.

◆

**Carpet Sweeper.**—The Scientific American describes a carpet sweeping machine, exhibited at the fair of the American Institute in New York. It consists of a small box in which there is a revolving fan, that sucks up all the dust and dirt, and carries it into a small compartment containing water. The woolen fibres and large particles are deposited in a drawer. The sweeping is done by pushing the box along over the surface of the carpet by handles. The whole aparatus is light and simple, and will outlast a thousand brooms. No dust is created, and the sweeping is most thoroughly done.

◆

**Rice Milk.**—Wash a pint of rice in two waters. Add half a pound of good raisins, carefully picked and cleansed, and boil well; pour off the water and mix one quart of rich milk with the rice by stirring. Put it again on the fire, and allow it to boil again for five minutes, and mix with it four tablespoonfuls of brown sugar, and two eggs beaten light, stirring well, and after the ingredients are thoroughly mixed, boil for five minutes longer, and the dish is ready to serve.

◆

**For the Cure of Croup.**—A piece of fresh lard, as large as a butternut, rubbed up with sugar, in the same way that butter and sugar are prepared for the dressing of puddings, divided into three parts and given at intervals of twenty minutes, will relieve any case of croup not already allowed to progress to the fatal point.

◆

☞ Brass andirons should be cleaned, done up in paper, and put in a dry place for summer.

# Mechanical.

## Improvement in Turpentine Distilling, Home Enterprise.

Our townsman, Capt. Daniel Reid, has obtained a patent for an improved method of extracting the Spirit of Turpentine from the crude material, which, if we mistake not, will prove of great importance to that valuable branch of business, in all the turpentine producing States.

The distillation is carried on by the use of steam, instead of the direct application of fire to the stills. The advantages to be attained over the old method, are principally four-fold —*first*, greater safety and less consequent loss by fire; *secondly*, less waste in the Spirit, with less liability to scorch; *thirdly*, the capability of doing continuous work, so that no time is to be lost in charging the stills, and the capacity therefore to do three times the amount of work in a day; and *fourthly*, the power to separate all the dross from the turpentine before it goes into the still, and a consequent improvement in the quality of the rosin. In addition to these very desirable qualities, it is believed that it will require much less labor to run the stills.

Next to cotton, there is no product of Southern growth, of more extensive use in the arts, than the oil of turpentine, and its residuum, rosin. Any improvement therefore, in the manufacture of these, must add greatly to the profits of this branch of business.—*Washington Dispatch.*

## Machine Shop.

We suppose every one will admit that one of the main supports to a community is a good, steady, competent and intelligent mechanical population. Where there are good mechanics and they are well patronized, the whole community is benefitted by increased business and population. We are pleased therefore to know that a Machine Shop has been established in Charlotte, by W. D. Pinckney & Co., where anything can be made from a Steam Engine to a horse shoe. Mr. Pinckney is a Mechanic in the true sense of the word, and is prepared to manufacture any kind of Machinery that can be made elsewhere. We think every citizen will appreciate the importance of an establishment of this kind to the town, and desire its success.—*Charlotte Democrat.*

Flouring Mill.—One of the largest Mills of this kind in the State, is in this town. It is a brick building, four stories high, the machinery is driven by steam, and is capable of doing a very large business. We learn that the original cost of the Mill was about $45,000. As will be seen by the advertisement of the Trustee, this Mill will be sold to the highest bidder on the 7th of August, and we have no doubt at a great sacrifice. Persons desirous of engaging in the business would do well to attend the sale. This is a good wheat market, and we suppose the business might be made profitable.—*Charlotte Dem.*

## Method of Preparing Kid Leather.

Yolk of egg is largely used in the preparation of kid leather for gloves in France and on the continent of Europe, in order to give it the requisite softness and elasticity. The treatment of the skins with yelk of egg, which is called by the French glovemakers nourriture, is daily becoming more costly, in consequence of the large consumption and increased price of the material used. It has recently been proposed to substitute for the yelk of egg the brains of certain animals, which in chemical nature closely resemble the yelk of egg. For this purpose the brain is mixed with hot water, passed through a sieve, and then made into dough with flour and alum, and used in the same manner as yelk of egg. The inventor of this substitute states that the quality of inferior skins may be so much improved by this treatment as to be fit for making gloves.

The Indians of our forests employ this very agent (brains of animals) for preparing their skins for mocassins, &c. They employ the brains of deer and buffalo, mixed with a weak lye of wood ashes, and after this they smoke the skins; the pyroligneous acid of the wood in the smoke accomplishes the same object as the alum used by the French skin dressers. Indian prepared skins stand the action of water in a superior manner to French kid. Furs dressed in the same manner resist the attacks of insects.

*Scientific American.*

To Clean Floors and Erase Grease Spots. To a pailful of hot soap suds, take three table-spoonsful of spirits of turpentine, and you will have a clean floor.

Rancid butter may be rendered sweet by churning it in new milk. It will remain sweet, however, but a few days.

## "THE SPIRIT OF THE AGE,"

**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*

---

## 100.000

## CHOICE FRUIT TREES FOR SALE,

## BY WESTBROOK & CO.,

AT THE

**West Green Nurseries and Gardens,**

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

**30 Bushels**

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense; | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

---

## W. W. DINGEE, & CO.,

YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore at the prices named.

| | |
|---|---|
| An 8 horse power, including thresher and separator, | $165 00 |
| A 4 horse power, including thresher and separator, | 150 00 |
| A 2 horse railway power, including thresher and separater, | 145 00 |
| A 1 horse railway power with thresher, | 125 00 |
| A fan that will clean grain at once running through, | 25 00 |
| A grain drill with grass seed-sower attached, | 75 00 |
| 2 or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, write to W. W. DINGEE, & Co.,
York, Pa

[6—6t.]

---

## FOR ONLY $1.

ON the receipt of $1, will be mailed to any person a recipe of a remedy for Horses, while suffering with Botts or Grubs, which was never known to fail to give ease in their greatest agony, if given in time. Many valuable horses have been saved from an untimely death by this remedy, and if given as advised, and it fails, the money will be refunded. No person who has a horse should be without this recipe. Other remedies will be added, which will be conducive to health and thrift, and a great preventive of distemper, which horses are subject to. Address R. M. BROWN, the P. M. of New Hill P. O., Wake county, N. C.

March 2, 1857. 51-3m

---

### Read! Read! the following:

We the undersigned have used and known used, the Receipt advertised by Robt. M. Brown, Esq., for the cure of Bots or Grubs in horses, and consider it the best remedy known, for that disease. Indeed, we have never known it fail giving relief in the very first instance, even when horses were suffering the severest agony. And the remedy is quick and effectual. For the benefit of every body, and especially for the benefit of that noble animal—the Horse—we recommend all to procure this valuable Receipt. We have known Mr. R. M. Brown's remedy to be used in very many instances, and never without effect. In some cases it has accomplished astonishing cures.

J. L. BENNETT, T. B. HOLLEMAN,
P. R. JONES, JOHN BENNETT,
EDWIN HOLLEMAN, of Wake County.
JOHN R. WARD, A. P. STROUD,
D. M. DURHAM, of Orange County, N. C.

New Hill, Wake county, N. C., Sept. 1857.

# PROSPECTUS

OF THE

# "North Carolina Planter."

The present is the seventh number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

WILL THEY DO IT?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ POSTMASTERS and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid as in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

July, 1858.

Fort Defianc

AUGUST NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO

THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE, FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

**A. M. GORMAN, Publisher, Raleigh, N. C.**
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., AUGUST, 1858. NO. 8.

*For the N. C. Planter.*

## Letters on Horizontal Ploughing and Hillside Ditching.

### No. 1.

*To the Hon.* Thomas Ruffin, *President of the North Carolina Agricultural Society:*

Hillsborough, Oct. 20, 1857.

*Dear Sir:*—Observing that the Executive Committee, in presenting subjects for agricultural Essays at the approaching annual Fair, have given especial prominence to "Horizontal Ploughing and Hillside Ditching," I propose in two familiar letters addressed to you, to be laid before the appropriate committee, to give you my views on that subject. And I think I may be excused for doing so, not only because of the importance of the subject to the agricultural interests of the State, but more particularly because for many years I have myself practiced this mode of cultivation, with perfect success. I am writing, therefore, what I know, and am not offering speculations merely.

The evil to be remedied, waste of soil from washing rains, in my view cannot easily be exaggerated. Considering the quantity of improved lands within the bounds of North Carolina, we may suppose as the lowest estimate, that two millions of acres of *rolling lands* have been cultivated the present year, *every acre* of which was subject to wash, from heavy rains; because the rains fell faster than the ground could absorb them, and the surplus water in running off, carried a portion of the soil with it. And if half this quantity of land has been cultivated in corn, cotton and tobacco, and the other half in small grain, we will probably be below the mark, in putting down the loss from this cause to the land owners of our State, for this one year, at an average of fifty cents per acre, or one million of dollars for the whole.

Ask each land owner, How much have your lands been damaged this year by washing rains? and believe me, sir, the answer in the mighty aggregate would make a fearful development.

Cast your eye over the State of North Carolina, and say how much the State has already lost, in millions of acres of once fertile land, now sterile and desolate from this cause. Make up the mournful estimate of the other thousands of acres which are being annually added to this dreary waste, and then tell me if that system can well be over-valued, which will stay this mighty destruction?

But can any art in ploughing effect this grand object? Can land be so cultivated, as not to wash? To question that fact, would be to stultify man, and impugn the wisdom of God.

This earth has been provided for the abode and sustenance of man, through all his generations, and in all time to come. But to carry out this design of Providence, the fertility of the soil must be preserved and increased. And if those who succeed us are to go on destroying the soil by their mode of cultivation, in the same ratio as the present and the past generations have done, how are our lands to support the teeming millions of population which are destined hereafter to possess them?

Land *can be so cultivated* as to prevent washing, by two modes:

First, by deep ploughing. Let the land be ploughed, say eight inches or more, with a *suitable plough;* I mean one which will turn the furrow not bottom upwards, but only partially over, and then leave the soil on the top and the clay still at the bottom; and let this plough be followed in the same furrow by a subsoil plough, loosening the land ten or more inches deep without turning up the clay at all, and you will have your land broken eighteen inches deep; and lands thus prepared will absorb the heaviest rains as they fall, and there will be no wash, because there will be no surplus water to run off.

But this plan, it must be admitted, is suited rather to large than to small cultivators. For each of these ploughs must be drawn by at least three horses. That is to say, each furrow costs the labor of two men and six horses. And the large mass of our farmers have not this force at their command.

Again, upon much of our land this plan is impracticable, because the subsoil is full of stones. And upon the whole, our system of agriculture is not perhaps sufficiently advanced to warrant the expectation that this system of cultivation will be generally adopted.

Secondly, the same object may be effected by horizontal ploughing, assisted by hillside ditching.

It is the aim of this system to leave the land broken up in beds parallel to each other, and upon a perfect level, with deep water furrows between them, and that this state of things shall be preserved throughout the cultivation of the crop.

This system promises the following, among other advantages:

1. First, and greatest of all, land thus prepared and cultivated will not wash, because every two beds with the water furrow between them form *a great trough* upon a dead level sufficient to hold all the rains ordinarily as they fall. There is therefore, no wash; when the water falls there it remains and is drunk in by the earth. But if the beds shall chance to be broken by one of those immense falls of sudden rain which do sometimes happen, or from defective work, then the hillside ditches are intended to receive and carry off the surplus water, and thereby prevent mischief from washing.

2. By this mode of cultivation you secure for your crops the full benefit of all the rains sent upon them by a beneficent Providence. Whereas, by the ordinary mode of ploughing, half the water is allowed to run off the fields, carrying the very best of the precious soil with it, and then complaint is made of dry seasons and short crops.

3. All the rains being thus preserved without washing or baking the land, it will remain loose and light through the season.

4. The horses, in ploughing, being always upon a level, perform their work with more ease and in a more perfect manner than they can do when tugging up and down hills, in the common way.

5. And lastly, preserve your soil by this system of cultivation, thus laying a secure and proper foundation for all other improvements, and you will have the comfortable

reflection of knowing that your lands will descend to the next generation not worse, but better than when they came to your hands.

In this letter I have studied brevity, and have therefore omitted many things which might probably have been said. In my next I propose to give particular instructions for this mode of ploughing.

With great esteem, your ob't serv't.,
J. W. NORWOOD.

◆

*For the N. C. Planter.*

HALIFAX Co., July 1, 1858.

*Mr. Editor:*—As a manifestation of the increasing interest being felt in the steady and onward progress of agriculture in the old North State, I offer below a notice, which you will please insert in the next number of the Planter.

Pursuant to previous arrangements, a party of twelve farmers met on the first day of April last, and united themselves into a brotherhood, under the style of "The Pioneer Agricultural Club." The officers of this Club consist of a President, two Vice Presidents, Treasurer, Recording Secretary, and Corresponding Secretary. Dr. R. A. Patterson was nominated and duly constituted President; T. W. Harris and Robert Boyd, Vice Presidents; J. B. Bowers, Treasurer; J. D. Thorne, Recording Secretary; and E. A. Thorne, Corresponding Secretary. A constitution was then offered and adopted, with regulations to govern our deliberations, &c. The object of this Club is mutual benefit, and the promotion of the cause of agriculture; and while we propose to hold formal meetings, monthly, to discuss different subjects connected with agricultural improvement, give the result of experiments, &c., &c.; yet the principal object we have in view, and the one by which we hope to profit most, is the monthly visit to the farm of some member of the Club, by the whole Club, where we propose to make a minute examination of his farming operations, his mode of cultivation, the condition of his team, hogs, farming utensils, wagons, carts, &c., in fact, everything connected with his farm; where we expect a free interchange of opinion, each member being allowed, by express understanding, to make any suggestion whatever, or any remark, either commendatory or otherwise, without fear of giving offence, which we think will stimulate each member to more than ordinary exertion, to have his whole farm in a proper condition. I might mention here, to obviate difficulties which have prevented the success of like clubs heretofore, we have restricted our number to twelve, and forbidden the introduction of ardent spirits, and all attempts at display. The above notice is offered at the instance of the Club.

E. A. THORNE,
Cor. Sec. Pioneer Club,
Halifax Co., N. C.

◆

*From the Christian Sun.*

DISMALONIA, June 7th, 1858.

*Mr. Editor:*—In looking over the last number of the *Sun*, I find a reference to the great destruction of the Wheat crop, in Va. & N. C.; by what is generally, nay, universally considered as the rust. In noticing the Wheat fields in my neighborhood, I was led to the conclusion that this is a new enemy, entirely different from that disease, from the fact, that the leaves or blades of the plant are the only parts affected, that the apparent powder contained on them is somewhat lighter than the rust, and is confined in more circumscribed patches, and that the head or grain is less affected than is usually the case in that disease. I was therefore led to believe that instead of fungus, this disease might be owing to animal origin, and more fully to satisfy myself, I touched one of the blades with a Stanhope lens, (a microscope of great power,) when I at once discovered that the minute and apparently impalpable powder, was composed of myriads of small globular, and perfectly distinct eggs, resembling in appearance those of the Silk Worm—of a beautiful golden color, and so minute that more than one hundred thousand could be placed on the surface of one line square. They were somewhat translucent and could be distinguished as containing a shell and contents. You may form some idea of their size when I inform you that the dust or powder from the wing of a butterfly, placed on the same instrument, proved to be feathers with distinct quills, each more than twelve times as large as a single egg.

I am not certain that the cause of rust in wheat, has ever been satisfactorily settled, but I am under the impression that it is still a mooted point. In a letter to Vancouver, (Surveyor of Devonshire England) in 1845 it was stated that "the rust was uniformly ascribed to the influence of the barberry, bramble, and numerous other shrubs and trees, and even grasses on which fungi is produced, the seed of which is scattered for miles by the first Spring breezes, provided they are accompanied by moisture or fog."

Others, among whom is Charles Hamilton, of Chester county, Pa., says, "it is owing entirely to the cold winds in the Spring, which nips the vegetation among young and tender plants, causing the most exposed to feel it the worst, and that fungi has nothing at all to do with the disease." Now if the disease under which our wheat is suffering be indeed the rust, neither of the above views are correct, for the reasons before stated. In any case however I shall keep a strict eye on the larvæ or worm, and should they when hatched do any farther damage, I shall certainly inform against them, hoping that you or some of your contributors may recognize them as old acquaintances, and find some way to eradicate them, or at least prevent their devastating effects.

Since writing the above, I have examined with my friend (Mr. Samuel Harrell of Gates Co.,) his crop of wheat, which is farther advanced toward maturity than any other in this neighborhood, and we have discovered that a large number of the eggs have already hatched, and produced a small red worm, some of them so minute as scarcely to be perceived by the naked eye, while the largest are about one fifth of a line in length, but when examined by the microscope seem to be about one inch long and as much in circumference, in appearance very nearly resembling the grub-worm.—They are confined in the diseased leaf which is rolled up at its sides as if for their protection.

Many of the eggs are still unhatched, presenting the same golden color as mentioned above, whilst others are perfectly white, and consist of the shell only.

With much respect, I remain your friend and servant,

T. C. HINES.

HINTS ABOUT POTATO TOPS.—A New York potato cultivator says:

The potato itself exhausts the soil but very little, as its elements are derived mainly from the atmosphere—but the potato top exhausts more than any other vegetable, as its elements are derived more from the soil. Potato tops, then, should all be carefully buried when and where they are dug. If this practice were universally followed, no crop would exhaust the soil less. Let the farmer try the experiment and write the result for the benefit of others.

## Principles of Manuring.

The great fundamental principle on which a manure is employed depends upon the fact that every plant during its growth accumulates in its system a certain quantity of matter essential to its existence, which it derives partly from the soil, and partly from the air. From the former it extracts the fixed mineral matters which exist there, and there only; while from both it obtains supplies of its organic food, that is of the water, carbonic acid, ammonia, and nitric acid, required to build up that greatly preponderating portion of its mass, which is combustible. Plants grow naturally without cultivation, because the soil and the air always contain a certain quantity of the elements they require; and as they either die in the spot where they grow, or are consumed by wild animals, these substances sooner or later find their way back to the soil, there to commence a new cycle of similar changes, so that a certain moderate production continues from year to year. But when agriculture comes into operation these conditions are changed; the crop is removed from the soil and consumed elsewhere, and though the air will still afford the elements which are derived from it as abundantly as before, the next generation of plants must find in the soil a diminished supply of the substances it obtains from hence. The necessary consequence is, that if the cultivation of plants be continued, the quantity of valuable matters in the soil becomes less and less, until at length they are so much reduced as to be no longer sufficient to maintain the growth of plants, and the soil is then said to be exhausted.

To restore the fertility of such an exhausted soil, vegetable matters or the dung of animals, which consists to a large extent of partially decomposed vegetable matters, must be returned to the soil, and herein lies the simple, the oldest, and the most generally employed method of manuring, and the only one possible, so long as the principles on which a manure acts were unknown. But now that the progress of scientific knowledge has enabled us, in place of considering farm-yard manure as a whole, to estimate the advantages derived from each of its numerous constituents, we have come to see that it may not in all cases be an indispensable manure, but may, to a certain extent, be replaced by other substances. In fact, when we inquire more minutely into the cause of the diminished fertility of a soil from which a succession of crops have been removed, it is found rarely to depend on the general exhaustion of all the requisite elements, but most commonly on the deficiency of one or more substances which have been removed by a certain number of crops, while the others still remain in sufficient abundance.—And hence the fertility depends not so much on those substances which are abundant, as in those which are most deficient, and the absence of which renders the other useless, the plants cannot grow without an adequate supply of all their constituents. A soil in this condition does not absolutely require farm-yard manure, but may be again made to produce abundant crops by the application of the one deficient substance, which is then called a special manure. When so treated, a soil will retain this renewed fertility for a certain time, but at length becomes again infertile, even under a continued application of this manure, which is then said, in ordinary language, to have lost its effect, although the real reason is, that the supply of a second constituent has been exhausted, and it also must be supplied in the form of a manure.

In all that precedes, we have supposed it to be required merely to keep up a certain moderate fertility, such as an ordinary soil may be supposed to possess in a state of nature. But agriculture does a good deal more than this, and seeks to produce a larger amount of vegetation than the natural soil can do, without extraneous aid—an effect which may manifestly be always produced by supplies of farm-yard manure, sufficient to afford a superabundance of all the different constituents of plants. But it is obvious that we may succeed equally well without it, if, as will frequently happen, some of the constituents be abundant, and their utility be limited by the deficiency of only one or two. Thus, for instance, we may conceive a soil containing a superabundance of all the mineral elements of the plant, but no ammonia or other nitrogenous matter, in which case the produce will be limited by the quantity of ammonia which the plants can obtain from the air during the period of growth, and may be greatly increased by a special manure containing nothing but that substance; so, likewise, it may happen that even where farm yard manure has been applied in very large quantity, the addition of a special manure may still be advantageous; because as ordinary dung consists of the constituents of plants, minus those substances which have been retained by the animals which fed upon them, it may be desirable to supplement the deficiences so produced; or if the crop to which it is applied happen to require an unusually large quantity of any particular element, it may be advisable to add an extra quantity of that substance, so as to bring out the full effect to its other constituents.

It cannot fail to be observed that, according to the definition now given, there is a very important distinction to be drawn between a general and special manure. When the former is used, all the constituents of plants are added to the soil: and not only is its fertility maintained, but if they be used with sufficient liberality, its productive capability may be materially increased.—Whereas, on the other hand, a special manure adds nothing to the permanent fertility of the soil, but only renders its existing constituents more rapidly available, and hastens rather than defers its exhaustion. Such, at least, would be the case if special manures were employed alone, a method rarely practiced, and which in my opinion, should be scrupulously avoided, except under very special circumstances. But if special manures be employed along with farm-yard manure, the result is different. A given quantity of the latter can, of course, produce only a certain amount of crop; but if mixed with a special manure, it is most rapidly converted into vegetable matter, and this is advantageous to the farmer. It may be urged that this is a matter of little moment, and that sooner or later the farmer receives back what he has put into the ground. But this is not the case; during six months of the year manure lying in the ground is undergoing decomposition, although there are no plants to make use of it, and the constituents then set free are in part at least washed away and lost. Even if none of it were lost, it would not be altogether a matter of indifference; for, to take an extreme case by way of illustration, if we suppose a part of the manure to remain undecomposed for fourteen years after its application, it will, if only five per cent. interest on its price be reckoned, have cost the farmer twice as much as that which was consumed during the year of its application. While, therefore, I consider the use of special manures alone a most injudicious and short-sighted policy, which can rarely be employed with advantage, there is no question that their proper combination with farm-yard manure is really one of the most important improvements ever introduced into the practice of agriculture.—*Dr. Anderson, in a Paper, read before the Highland Agricultural Society of Scotland.*

*From the Valley Farmer.*

## Clover Seed—Giant Clover.

Editors Valley Farmer:—I owe you an apology for not answering, at an earlier day, your favor of the 2nd inst., in regard to the method practiced in this section, of cutting clover, threshing off the heads, and hulling and cleaning the seeds. I have only to say that my time has been so thoroughly occupied that I have found it impossible, until now, to comply with your request.

Introductory to any remarks upon special inquiries, allow me to call your attention to the cultivation of a species of clover, in this section, which, from the most thorough inquiries I have been able to make, has been very sparingly introduced into other parts of the State, and in fact seems to be confined to some three or four counties in the interior, viz:—Washington, Marion, Lincoln and Boyle counties—a red clover, very superior to the kind in general cultivation, by no possibility a humbug, and if generally known, would doubtless be universally cultivated. It is called in this section, "Saplin, or Giant Clover," and was introduced into cultivation here, about the year 1848, by the Rev. John Sandusky and Eli Adams, practical farmers of Marion county. It was brought from Maryland.

The Saplin or Giant Clover is distinguished from the ordinary red clover by the size and height of its stalks, as they are as large again and grow from a foot to eighteen inches on an average, higher; it is of more rapid growth in the spring; will bear pasturing earlier, but does not bloom as early by three or four weeks, consequently better adapted to be cultivated with timothy. The seeds of the giant clover are smaller than the common, and it usually produces from two and a half to three bushels of seed per acre. I enclose you a small parcel of seed that you may make an experiment with it. The seed of this clover sells readily at from $8 to $10 per bushel, and is still selling this season at $8, common clover seed at $5 in this neighborhood.

I will now address myself to the matters of inquiry in your note. Our farmers usually pasture their clover until about the 10th of June, when stock is turned off, and the second or seed crop is allowed to grow. As soon as the seed is sufficiently mature it is cut down with the ordinary mowing scythe, a very light labor, two or three hands being able to cut, in good time, between fifty and a hundred acres; in fact a distinguished farmer in Marion county, now dead—the late James C. McElroy—has been known to cut a hundred acres, in one season, with two hands, and these hands consisted of a negro woman and a half grown boy, and in that year he sold the seed thus saved for $1000—seed being low.

The mode practiced in getting off the heads is as follows: A location is selected near the middle of the clover field, and a treading floor prepared in the usual way; (it won't do to work with it in barns, on account of the dust;) a team is then set at work, hauling in the straw to a treading yard, where one hand, a boy and two horses, get off the heads as fast as it can be hauled in; as the heads are thus separated, they are thrown up into a kind of sack in the middle of the floor, until the process is completed.

The next step after separating the heads from the straw, is to tread out the seed; and here, up to this time, has been with us the tug of war. All the horses that the treading yard will hold are brought into requisition—say from eight to ten, and in the hot sunshine, almost smothered in dust, the laborious farmer finds at the winding up, that he has succeeded in separating about five bushels of seed a day. A common wheat fan and meal sifter finishes the operation.

An experiment made this winter, however, with my "Ralston Thresher," bids fair to inaugurate a new mode of separating the seed from the hull. A neighbor of mine, Col. C. F. Bosley, of this county, had cut and reduced to this last process a large crop of clover, and despairing of success, in separating the seed from the hull by the treading floor, had made several unsuccessful attempts to buy a regular clover huller and cleaner. The winter season was on him and he was about to lose his whole crop of seed, when at my suggestion my thresher was tried; this we did by stopping the elevator and upper fan, and allowing the seed to escape at the chess spout. We set the horses to work; the clover hulls were in a very bad state, having been exposed to snow and rain, during the greater part of the winter, and yet by running them through the machine some two or three times, we cleaned about fifteen bushels a day; it was pronounced a perfect success by all who witnessed it, and the conclusion was arrived at, that we could easily clean, at the proper time of the year, 20 bushels per day. Whether this machine will answer to separate the hulls from the straw we don't as yet know. One thing is certain, however, its success in the most difficult, and in truth, only formidable part of the labor, has reduced the process of saving clover seed, down to a matter of but little difficulty, compared to what it has been heretofore.

Recommending this subject to the attention of gentlemen of larger experience, and more ability to treat it, I close by submitting this hurriedly and imperfectly prepared article to your kind consideration.

Yours, JAS. P. BARBOUR.
*Springfield, Washington Co., Ky.*

## Chinese Sugar Cane.

We are inclined to think that there are but few persons, in this section, who are giving that attention to the cultivation of this new and valuable plant which its merits claim. This is the result of former failures with "new things," as the *morus multicaulis*, Baden Corn, and Berkshire hogs; and the prejudice which these and other similar *manias*, have lodged in the public mind.—Farmers, as a class, are rather incredulous, especially on *new* subjects in the line of their business. It is seldom you will find one of any experience, who does not believe he is thoroughly right in the plan or system by which he conducts the operations of his farm; and to question it, is a matter, which, if you would not excite his contempt and displeasure, you must touch with great delicacy. On the subject of innovations, either in the crops or the mode of cultivating a particular thing, he is sensitive; and nothing short of *very strong* demonstration will usually succeed in gaining his confidence. But once convinced of the value of a new thing, and committed to it by considerations of pleasure, convenience and profit, and no class evince more firmness and steadiness of purpose in the face of ridicule, and against the jeers of the unbelieving.

Now, one would suppose that after all the experiments which have been made, in different parts of the country, with the Chinese Sugar Cane, as a syrup producing plant, that the number of its friends would bear something like a fair proportion to the fame of that plant; but this is not so. And so far from its being true, if we are not greatly mistaken, many of those who made unsuccessful trials, last year, are now to be found amongst those who sneer at and talk against it. Nor does this proceed from such thorough knowledge of the subject, as may justly produce a well-settled conviction of the mind, but rather from the prejudice to which we have already alluded.

Well, what is to be done in such a case? Plainly, let the evil cure itself. The lovers of truth may help on the remedy by working out practical results which will laugh to scorn the incredulity of ignorant and prejudiced minds; and we doubt not this will be done; and that ultimately, the sugar cane will become one of the regular crops on every profitably conducted farm. But it is the work of time, and to that it must be left.

Amongst those whose experiments, with the cane, last year, were satisfactory, we have heard of only one, Mr. Robert Ramsay, of Iredell, who is cultivating the plant, this season, with the expectation of making it profitable. It will be remembered that we published, in this paper, the results of his last year's experiment, to wit, 200 gallons of excellent syrup from less than one acre of land. Mr. R. sold enough of his crop to pay for a large cast iron cane crusher, and all the expenses incident to the introduction of this new branch of business on his farm; and still had left more than enough to supply his family, white and black, the year round. His first trial of the cane, therefore, was entirely successful, and was so, doubtless, because he took the necessary pains to ensure it. His syrup was equal to the best New

Orleans or sugar house molasses, and from a recent trial of it, we find that age has improved its quality. This fact may be of interest to those who have had reason to complain of theirs becoming *sour*. Mr. R. has had cause to make no such complaint—quite the contrary. He believes, if time would produce any change, it would convert it into sugar, of which his hogshead affords daily proof, in the abundance of crystals which are obtained at every drawing. He has pitched a crop of cane, this year, which he thinks will yield from 2,500 to 3,000 gallons.

With so striking an example before the public, we cannot but hope that this plant will yet become a favorite with the people of North Carolina, and that the day is not distant when she will, at the least, put a stop to the importation of foreign syrups and molasses, by producing enough for our own suply.—*Salisbury Watchman.*

## The Earth Worm, an Agricultural Laborer.

It is well to make ourselves as much as possible familiar with all the agencies which help to work out the problem of fertility in the soil, and it is wise to learn the uses of what, to our self-conceited wisdom, appear very insignificant and useless creatures. It is not generally supposed that the despised earth worm, who stretches his length on the moist earth in the morning, is of much else use than as food for the early bird or chicken, or at most as bait for the truant boy's fish hook. It will be found by those who will take the pains to investigate, that he is a very useful agricultural laborer, working early and late, and helping those most who help themselves the most. The earth worm does not like to work in poor land. You rarely find him there. But feed your land, and put the elements of richness there, and he will help you to work them up and make the most of them. Walk over a rich pasture ground early in the morning, and see thousands of perforations that they have made, opening the earth through many inches, letting in air and rain, and bringing up from below, a thoroughly worked impalpable earth, and placing it for use on the surface. A scientific writer on Zoology, says:

"The burrowing of earth worms is a process exceedingly useful to the gardener and agriculturist; and these animals are far more useful to man in this way, than they are injurious by destroying vegetables.—They give a kind of under tillage to the land, performing the same below ground that the spade does above for the garden, and the plough for arable land, loosening the earth so as to render it permeable to air and water. It has lately been shown that they will even add to the depth of soil; covering burrow tracts with a layer of productive mould. Thus, in fields that have been overspread with lime, burnt marl, or cinders, these substances are in time covered with finely divided soil, well adapted to the support of vegetation.

That this result,—which is most commonly attributed by farmers to the "working down" of the material in question—is really due to the action of the earth worm, appears from the fact that in the soil thus formed large numbers of "worm-casts" may be distinguished. These are produced by the digestive process of the worms, which take into their intestinal canal a large quantity of the soil through which they burrow, extract from it a great part of the decaying vegetable matter it may contain, and eject the rest in a finely divided state. In this manner a field manured with marl, has become covered in the course of 80 years, with a bed of earth averaging thirteen inches in thickness."

White, in his Natural History of Selborne, says:

"Worms seem to be great promoters of vegetation, which would proceed but slowly without them, by boring, perforating, and loosening the soil, and rendering it pervious to rains and fibres of plants, by drawing straws, and stalks of leaves and twigs into it, and most of all, by throwing up such infinite numbers of lumps of earth, called worm-casts, which being their excrement, is a fine manure for grain and grass.

"Worms probably provide new soil for hills and slopes, where the rain washes the earth away; and they affect slopes, probably to avoid being flooded by water. The earth without worms would soon become cold, hard bound, and void of fermentation, and consequently sterile."

Stockhardt describing a productive soil, says: "It must—and this is the first and principal necessity—*possess a crumbling, soft consistence, and this consistence must not be lost through the operations of tillage.* The German farmer terms this condition, especially favorable to growth "*gahre*" (mellow?) Whether this name be derived from *gar*, that is *completely, well,* or from *gahren*, to ferment, it is in either case expressive, especially in the latter, since it is beyond doubt, that those processes of decomposition taking place in the soil, which may be very properly regarded as a kind of fermentation, contribute particularly to bring it into this condition. What this condition is, and how it arises, I conjecture may be explained as follows. In the *more tenacious* soils the carbonic acid evolved in the decomposition of humus, forms a little cavity around each particle of humus substance, consequently the whole mass becomes traversed by fine pores, just as the carbonic acid in the fermentation of bread renders the tough mass of paste porous. The legion of animals, from the earth-worm to the infusorium, act in the same way, namely to loosen, since they penetrate and perforate the soil in all directions; as do moreover the roots of plants, in proportion as the tenacity of the soil allows them to spread. The effect will be greatest in all those directions where the soil is kept for a long period undisturbed and in a uniform state of moisture, as is the case when it exists *under an overshadowing covering of vegetation.* Hence the soft and open consistence which the soil exhibits when it has borne clover, lucerne, rape or lupins, or has lain fallow for some time."

Professor Stockhardt, it will be seen, suggests here, another reason for the good effect of surface covering, in the fine condition produced in the soil, by the workings of "legions of animals, from the earth-worm to the infusorium." This is additional to and not inconsistent with the suggestion of Mr. Clemson, that these "legions" passing thro' their short-lived course, perish upon the scene of their labors, and leave their remains to nourish a more directly serviceable form of life. Let us respect the earth-worm therefore as a lowly but not useless fellow-worker with us, and let no one needlessly set foot upon him.

---

How happy he who tills the soil.

---

*From the Country Gentleman.*

## Best Mode of Curing Hay.

*Messrs Editors:*—I notice that a controversy still goes on respecting the time of cutting and manner of curing hay, especially timothy. I now intend giving my views at length, as it has been my study for half my life-time, to cut and cure at the time and in the manner most palatable to animals, and at the same time most nutritive. I believe nothing of food kind is nutritive, unless it has a good flavor or smell; therefore it is important, both for our own interests and for the comfort of the dumb animal under our care, that we should have their winter food prepared in the best manner we can to retain a good flavor. I will state my reasons for this opinion: I was informed long ago, by one who I suppose knew, that to make the tobacco plant a narcotic, it had to be gathered at a certain time, and cured in a peculiar manner. If not so gathered and cured, it would be insipid, or lose its narcotic quality, and would not be used by man; and that beautiful flower, the fox-glove, requires to be gathered at a certain stage of its growth, and cured in a very peculiar manner, being dried in the dark, and then called Digitalis, a powerful medicine for both man and beast. So it is with other medicinal flowers and herbs; they need a certain treatment, both in the time of gathering and curing; otherwise they are worthless. Such reading led me to try, and, if possible, find the best time for cutting and manner of curing hay; and I doubt not, had hay been made for man, that centuries before the nineteenth, it would have been a settled point by man, or good housewives, as to which is the best time of cutting and curing it, to answer our tastes.

I will now give my time of cutting, and also the manner of curing when cut by scythes, as also the manner which I think indispensable when cut by machines.

As to time of cutting, I know that every farmer will agree with me, that nothing they ever fed to cattle, (that are fairly fed during the winter,) will put on as much fat or increase their weight near as much in a given time, (say two months) as rich pasture.—Therefore, I argue that *grass* should be cut for hay, and not let it stand until it becomes dried hay before it is cut. If I could cut all my hay in a day or two or a little longer, I would let timothy stand until the seed was formed, but still quite soft; but as that cannot be accomplished in the time mentioned, I begin when in full flower.

When cut with the scythe and the grass heavy, I did all the curing in the swath. Grass will stand a good deal of rain without injury, if left in the swath, when cut green. When I intend to take it in, if not thoroughly dry on the lower side, if wet from rain I turn the swaths over before raking, if even somewhat green on the underside of the swath; but if no rain had fallen, I raked it up, and took it into the barns. In that way it took a sweat if a heavy crop in the swath, and another sweat in the mow; and I hold it indispensable that hay, for either sheep or cattle, should have a sweat, and it is equally requisite as that tobacco or fox-glove should have their peculiar modes of curing and time of cutting. If a light crop cut with scythes, as soon as a little wilted, I raked up, put in good sized or rather large cocks, let it take a good sweat in the cocks, and let them alone until dry enough to take in. (Timothy hay cut green and cocked in a green state, will stand much rain without much injury if let alone.) In this way I always made fine flavored hay, and my stock always did well upon it.

But since we all around here cut our grass with machines drawn by horses, the mode of curing must be somewhat different to make fine flavored nutritive hay. The machine cuts *and spreads it as evenly as it grows on the ground;* therefore it dries much mo e suddenly than if cut by scythes, and the horse-rake ought to be started a few hours—(more or fewer, according to the temperature)—after the machine is started, and the grass put in cock, and not left until the machine has done a day's work, and until the dew goes off next morning. If a high temperature, your hay will then be so dry that it will take no sweat; hence no flavor, and much less nutriment. The trouble with those men who make a trial of cutting green, is that they dry it so much in the hot sun that it cannot sweat in either cock or mow. I have seen stacks of hay in many places, the hay having been put up so dry, that if my arm had been long enough I could have put my hand through them, and that after they had stood for months, and the hay had no more flavor, (except the little ripe seed left on,) than brush from a dead tree. I want to see no stacks or hay mows put up for me but will in a week or ten days become so solid that it is with difficulty you can push your hand into them one foot.

Now, Messrs. Editors, I have given you as lucidly as I can, my views and reasons for deviating from the rules laid down by far more learned men, as to the time for cutting and manner of curing timothy hay, and indeed all other kinds of hay I have had any experience with in this hot climate. Yet I have no doubt but some of those men, possessed of good talents, will criticise my mode not a little, but all I ask is, that my *brother working farmers* will prove me and try me, and see whether I know any thing of the true principles of making and time of cutting hay. Let them follow my plan strictly, and then either approve or condemn it, according as they find it. As haying will be in less than two months, I should be pleased if five hundred farmers in the State of New York would give my plan a trial and report.

It is high time, in this age of enterprise in the world, that the true t.me and method of cutting and curing hay was known, so as to make it most pleasant to the taste of the dumb brutes, and most profitable to the owner. JOHN JOHNSTON.

*Near Geneva.*

## Tobacco.

Respecting this popular article, and the manufacture of cigars, it may be expected, in our rambling notes that we should say a few words. It is well known that the tobacco plant is the product of but a small portion of the island—the southwest. A person confining himself to short rides from Havanna and to the vicinity of the railroads, would see about as much of the weed growing as he would in Pennsylvania or Connecticut, the soil in the other parts not being more propitious to the flavor than that of our own country. Good tobacco is thus a dear article, and becoming annually more so, as the cultivation recedes from the great mart by the wearing out of the land, which is the case yearly. Formerly the tobacco lands were about eighteen miles from the city; they are now at least one hundred and fifty miles distant. Large dealers in cigars make their own cigars from the crops of the extensive cultivators whose tobacco is known to them and thus acquire a kind of monopoly of the best; smaller operators endeavor to have as good an article by assisting the grower to new lands and taking an interest in them. The consumer of a few thousand cigars watches his opportunity, and when sure of a good seroon or two, purchases and conveys it to his own house, where it is manufactured under his own eye, from a known article, and therefore to his taste. The cigar maker comes in to him for a week, more or less, and charges by the thousand.

In addition to these plans, varied with the various degrees of enterprise and capital embarked, there may be seen all over Havanna, blacks and whites most industriously employed in rolling cigars; and, ten chances to one, if you stop at a posada in your rides in the neighborhood, however humble, there will be found under a shed or in some corner, a parcel of dark looking fellows similarly engaged; and yet, with all this industry, it is still a wonder whence proceed all the million of smoking cigars which perfume the whole civilized world. Their source is to be sought for in out-of-the-way places, in garrets and private domains which are out of sight, which are delivered more or less, daily, to the great dealers who supply the capital and the raw material. Cigaritas are made by women and men who can follow at the same time another employment, such as keeping watch at the door of a hotel, &c.

Numerous small manufacturers sell their article at a low figure to the great dealers like Partigas or the Cabanas' houses, who subject them to a rigid picking; the *best looking* on the outside, and which may have cost, in the unpicked state, ten dollars per thousand, are number one and will be charged to the unthinking American customer, who looks only to the external appearance, at fifty dollars, the second at twenty or thirty, and the culling will find a market at about the original price; so that one man smokes at six or seven cents the same tobacco exactly that the better informed and more economical people get for one cent. The reputation of the (nominal) maker has much to do with the price, and this reputation, as in a thousand instances in all countries, is kept up *outside appearance*. When a particular brand, size and shape have become popular in any country, strong efforts are made to keep up this appearance, and a stimulated article has to be resorted to the moment the demand exceeds the supply, which is always limited. Then come the various methods of deception; the wrapper must be exact in color and it is dyed; the shape must be the same, and the maker skilled in this particular form must have a higher price, or he will go over to a rival house.

Instances of this kind of difficulties are constantly related, and an employer has frequently to advance large sums to his best workmen to keep them in good humor; when this quality fails them, the rival will pay all they owe to get them into his workshop, the best makers being always in demand, and earning from two to six dollars a day, according to their skill.

The leaf requires to be in a particular stage of moisture to work to advantage, and you may see, as the evening hour of closing the factory comes on, the master mind is dropping or sprinkling his leaves and laying them out all over the rooms in various proportions, according to ascertained necessity. And here another process is resorted to; this is of course the moment for dying the wrapper; but it is also the opportunity embraced to *flavor* what is to constitute the interior; a popular brand must be kept as nearly as possible of one *taste*; as in wine, it is easy to deceive in this particular, and the *filling* is immersed in a solution of other tobaccos, made to resemble as nearly as possible the flavor required. Thus, a good tasted crop will flavor a whole invoice of cigars very probably manufactured from Virginia, or tobacco imported from some other island. This is done in wines of all countries, and it is surely as fair a transaction in cigars.

Cigar making is a profitable operation, though it may be deemed of importance to the sugar. Both combined have made money extremely abundant during the late season of high prices. Eight millions of specie arrived in Havanna in March, and the rate of interest was but two per cent. per annum; new banks were going into operation on a speculative scale, and it was seasonably argued that cash so easily collected as it was would lead to the ruin of many now called wealthy. Cuba has its revulsions as well as New York and Philadelphia.

The cultivation of the island is slovenly in the extreme. There is often as much difficulty experiened in ploughing the land as in a new clearing incumbered with stumps in the United States, from the underlying coral rock.—*Horticulturist.*

## Smut on Wheat.

Smut seems to be a parasitic fungus, of which there are several varieties, as on Indian corn, wheat, etc. The black dust of matured smut is to be regarded as its seeds, each particle of which, however light and evanescent, is capable of germinating and producing its kind when brought into favorable circumstances. It is difficult to say precisely how these seeds find their way into the receptacles of growing wheat. But it is probable that they adhere to the kernels of wheat when sown; and we know that in some way they are carried upward with the growing plant; and are developed at he base of the newly forming kernels, simultaneously with the bursting of the spike from its sheath, or perhaps a little before the head makes its appearance. From this time the fungus grows and develops itself more or ess rapidly, as the weather favors or otherwise, drawing its nutriment from the plant, thus partially depriving the forming wheat of its appropriate food, as well as insinuating a hurtful ingredient.

Now, on the supposition that the smut in wheat comes from sporules (smut seeds) distributed with the seed wheat, which we suppose to be correct, it follows that if you could wash the seed before sowing, perfectly clean, there would be no smut in the crop, for however warm, damp and lowery the season, smut will not grow, unless there is seed for it to grow from.—But it is impossible to secure perfect cleanliness from these sporules or smut seeds. They are too minute to be all washed away; and their vitality is not destroyed by pure water. Hence, the importance of washing seed wheat in some solution that will destroy the vitality of such of the sporules as fail to be washed out.

Salt, plaster, quick-lime, arsenic, sulphate of copper and other things have been recommended. The first is always at hand, and the next two are seldom far absent from the farm; and we believe that these are sufficient.—If the seed be first washed in pure water, then in a weak brine, of say one quart of salt to a pail full of water, and then dried in plaster or quick lime, (the latter not to be used too fresh nor very freely, lest it injure the vitality of the wheat,) we think that there will be little danger from smut, and that the operation will be favorable rather than otherwise to the germination and early growth of the seed wheat.

### Miles on Horse-Shoeing.

A late number of the Journal of the Royal Agricultural Society, contains a paper on this subject by the author of "The Horse's Foot—How to keep it Sound"—a pamphlet largely circulated in this country. He contends that by good shoeing and care, the horse may be kept in good working order to double the age now usual—summing up the matter as follows:

"If I were asked to account for my horse's legs and feet being in better order than those of my neighbors, I should attribute it to the four following circumstances: First, that they are all shod with few nails, so placed in the shoe as to permit the foot to expand every time they move; secondly, that they live in boxes instead of stalls, and can move whenever they please; thirdly, that they have two hours daily walking exercise when they are not at work; and fourthly, that I have not a head-stall or rack-chain in my stable; these four circumstances comprehend the whole mystery of keeping horse's legs fine, and their feet in sound working condition up to a good old age."

"In regard to fastening the shoe—it is best allowed to expand to the weight of the horse, by placing three nails in the outer limb of the shoe, and two in the inner limb, between the toe and the commencement of the inner quarter; a larger number than five nails can never be required in any shoe of any size, or under any circumstances, excepting for the sole purpose of counteracting defective and clumsy fitting."

### Turnip Seeds—Tuscan Wheat.

Should any of our readers be disposed to make a trial of the new varieties of Turnip seed ready to be distributed by the Patent Office, according to the schedule accompanying them, and stating their willingness to report the results to the Patent Office, they have only to signify the same to the Hon. J. Holt, Commissioner of Patents, and they will be furnished with a supply of the seeds—some ten varieties—and the schedule. Some trouble will of course be involved, but not more than any careful farmer will probably be willing to take, to subserve his own and the public interest.

The circular respecting the Tuscan wheat we give entire:

"U. S. Patent Office,
June 14, 1858.

"Sir:—In a few weeks I will send you a parcel of Tuscan wheat for experiment, with a view of testing its adaptation to your region. By the accompanying certificate you will perceive that it possesses qualities which appear to commend it to general notice.

"In order to produce the best possible result, I would suggest that you sow the seed in drills, nine or ten inches apart, on good soil, properly prepared, and at a considerable distance from other wheat. If successful, you will confer a benefit by reporting the result of your experiment to this office; sending a sample of the wheat, and stating the quantity raised to a given area of ground.

Yours respectfully,
J. HOLT, Commissioner.

CERTIFICATE.

"We, the undersigned, farmers of Berrien county, Michigan, with pleasure state that we have been acquainted with a variety of wheat introdu into this county a number of ye since by Mr. Wm. Dougherty, kno as the Tuscany wheat, and have ne known or heard of its being inju by the Hessian Fly, or any other sect, it also being very valuable every other particular.

Jas. M. Platt,
John Defledd,
L. A. Barnam,
Henry H. Boon,
Preston Boon,
S. D. McUmber
Samuel Schlei
Rufus McUmbe

### Composts.

In or near the garden, and in so out of sight corner, there should at all times a compost heap for rece ing all kinds of rubbish that can h the least value as manure.

Make a shallow excavation of su cient size, and a little lower at end than at the other, forming w the earth thrown out a small emba ment all around it. Into this th green weeds, the sweepings of yard, the refuse of vegetables, lea decayed vegetable matter of all kin woolen rags, old plaster, charc dust, soot, soap-suds, brine slops fr the kitchen and chambers, etc. heap should be dug over occasiona adding a little ashes and lime. A mal manures should be composted a separate heap, to which ashes lime should not be added, as t would do harm by setting free ammonia. In the latter case, ch coal dust, plaster of Paris, and veg able mold, leaves, turf, or swamp m should be used.

One who has never tried the exp iment of carefully husbanding the ments of fertility which accumu about a house, yard, and garden be astonished at the annual amo and value of the compost which m with very little trouble, be thus ma factured. Try it.

### Advice to Consumptive People.

Dr. Hall, in his Journal of Health, says to his consumptive friends: "You want air, not physic; you want pure air, not medicated air; you want nutrition, such as plenty of meat and bread will give, and they alone; physic has no nutriment; gasping for air cannot cure you; monkey capers in a gymnasium cannot cure you; and stimulants cannot cure. If you want to get well, go in for *beef and out-door air*, and do not be deluded into the grave by advertisements and unreliable certifiers.

### Preserving Fruits and Vegetables.

Within the last five or six years an extensive business has grown up in the preservation of fresh fruits and vegetables, in cans and jars, for use in the winter and spring. As long as it was possible, the mode was kept a secret by those who made it a matter of commercial speculation; though the principle has been known for a long time, and applied to the preservation of meats and other provisions, for ship stores, which are brought to the table after the lapse of years as fresh as when they were taken from the baker's oven. The principle is simply to raise the temperature of whatever is to be preserved, whether meats or fruits, to the boiling point, and then sealing the vessel air-tight. In its practical application there are some variations—some articles requiring to be more or less cooked, particularly vegetables. Tomatoes, for instance, should be stewed pretty much as they are prepared for the table, and deprived of the water in which they abound. Green corn, peas, beans, &c., should also be cooked. It is chiefly fruits, however—and peaches more than any other fruit—that are prepared in this manner; and now that the season is approaching when they will be cheap and abundant, we would recommend to our fair friends to provide themselves with a good supply of jars and cans, so as to be ready to use them at the most convenient time. The most approved are Arthur's self-sealing cans, in the use of which there is not the least difficulty after reading the directions which accompany them. The cans are made of tin, and the jars are a fine article of delf-ware, both of which will last for years. They are a most valuable invention, costing but little, and we hope they will be brought into general use this season.—*Southern Farmer.*

◆

Trees Attacked by the Rust.—The Savannah Republican of Saturday says:—We received a letter yesterday from a friend in Upson county, from which we extract the following:

"Enclosed I send you two leaves, one of a grape vine, the other of a locust tree. You will see that the rust, or blast, or mould, (whatever it may be,) has attacked the trees as well as the cotton. When these leaves were plucked, there might be seen upon them a very small insect or mite which seems to be connected in some way with the cause of the rust, if rust it be which I am inclined to doubt."

### Algeria Wheat.

Judge O'Neall sent us during last week a sheaf of Algeria wheat. He says in his note accompanying: "I send you a specimen of Algeria wheat. It was received from the patent office through my lamented friend Judge Evans, in the fall of 1854. It was neglected to be sown until the fall '55, it was badly put in. I had not more than a quart, the result of that sowing. Fall of 1856, that was drilled and well manured with guano, the plow was run once through the drill. When harvested about 9th or 10th June, 1857, and cleaned, I had a bushel of seed. That in October, 1857 was drilled in about three acres of old red land, about 300 lbs of guano was put upon it. The ploughs were run, in the spring, once through the drills, and the result has been about 60 or 70 dozen of remarkably heavy sheaves. The variety is peculiar and the head is flat and heavily bearded. The beard is generally of a black hue; the grains are very large. I have not tried it for flour, but will do so this season. If it should not turn out to be good for flour, I am persuaded it will be a fine grain for stock. It seems to be heavier and more productive than any of our usual wheat varieties. I believe by sowing it in juxtaposition with the Spanish and Marshall wheat, I shall succeed in obtaining an entirely new variety, but that has yet to be tested."

*Newberry Sun.*

WHITEWASHING.—At this season of the year, when a great many persons resort to whitewashing as an economical mode of improving the appearance of their out-houses and fences, we presume, that a good receipt for making whitewash would not prove unacceptable.

Take a clean barrel, that will hold water. Put into it half a bushel of quicklime, and slack it by pouring over it boiling water sufficient to cover it four or five inches deep, and stirring it until slacked. When thoroughly slacked, dissolve it in water and add two pounds of sulphate of zinc, (which may be had at any of the druggists,) and one pound of common salt, which will cause the whitewash to harden on the wood work, then add sufficient water to bring it to the proper consistency.

To make the above wash of a pleasant cream color, add 3 lbs. yellow ochre.

For fawn color, add 4 lbs. umber, 1 lb. Indian red, and 1 lb. lampblack.

For grey or stone color, add 4 lbs. raw umber, and 2 lbs. lampblack.

This wash may be put on with the ordinary brush, and will be found much more durable than common whitewash.

## How to Destroy Catepillars on Trees.

Having observed several methods of destroying the caterpillars that infest apple trees in the spring, such as rubbing them off, burning with shavings, cotton and turpentine, &c., I am induced to give you the simple and perfectly effectual method practiced here. Take common soft soap and thin it with water, so that it will not slip off the brush, and a person may stand upon the ground and apply it to the nests with a common painter's brush, inserted in a hole bored through one end of a long strip sawed from a pine or other light board, and all that it touches it will instantly kill. I applied it when the nests are small, very few will escape the first application. After the worms are larger, it is equally efficacious, but much more difficult to apply thoroughly.

Any thin oil mixed with spirits of turpentine, is equally destructive to the worms, but the soap is less injurious to the trees.—S. L.—Manchester.—*Country Gentleman.*

☞ To cure scratches on a horse, wash the legs with warm soapsuds, and then with beef brine. Two applications will cure the worst case.

# EDITORIAL.

## RALEIGH, AUGUST, 1858.

☞ The Postage on the N. C. Planter is ½ cent on each No. if paid quarterly in advance; or 1 cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year, to any place in the United States.

### The Approaching State Fair.

We learn that the Executive Committee of the North Carolina State Agricultural Society, in session last week, changed the time of holding the Fair from November 2nd to October 19th.

This alteration will meet the approbation of a large number of citizens, the time fixed, 2d November, being in their opinion, too late in the season for the comfortable accommodation of the large crowd that may be in attendance. It will also avoid a conflict with the Virginia State Agricultural Society, whose Fair will be held in Petersburg at that time, (2d Nov.) and as the United States Agricultural Society will hold a Fair at Richmond, Va., and the Maryland Agricultural Society a Fair at Baltimore, both at the same time, to wit: 26th, 27th, 28th and 29th of October, the committee have selected the 19th, 20th, 21st and 22d of October next as the most suitable time for holding the North Carolina Fair, which is the original time selected at the establishment of the Society.

The Committee corrected and revised the premium list, which has been published in large hand bills.

Mr. Rufus S. Tucker, of Raleigh, was appointed a member of the Executixe Committee, in place of Wilson W. Whitaker, resigned.

The usual arrangement with the Railroads for the transportation of stock, &c., free of charge, and passengers at half price, has been made, a further notice of which will be given hereafter.

**Wilson W. Whitaker**, Esq., has been appointed Secretary to the Executive Committee.

☞ Our Farmers and Mechanics in many parts of the State, intend making a grand show at the State Fair in October next.—That's right. Let every body resolve to come, and bring something for exhibition along with them, and thus we shall have a Fair that will somewhat represent the capacity of our soil and the skill, industry and enterprise of the Farmers and Artisans of our State.

☞ We have received a polite invitation to attend an Agricultural Festival and Party at Henderson on the 29th of July. We hope to be able to attend, but regret that we shall not be able to notice the same in this number of the Planter, as our last form will go to press on that day. The occasion is intended to celebrate the completion of the buildings and grounds for holding the next County Agricultural Fair in October. The public spirit of the Granville Farmers is proverbial, and we doubt not their next Fair will even excel the splendid exhibitions made at its predecessors.

☞ We are disappointed in not receiving Prof. Emmons' second article of the series, on "the Grasses of the State," for this number of the Planter. Prof. E. is absent from the City at present, but having promised to send it by mail, we confidently expected it in time for this No. It will doubttess be along in a few days.

☞ We are under many obligations to the Press of the State for the favorable notices our Planter has received at their hands—but, a few have never given us a notice at all. We hope these will remember us hereafter. A word of commendation from the Press may do us much good—and as the Planter seeks to promote the advancement of our good old State, we hope all the Corps Editorial will lend us a helping hand.

## Crop Prospects.

We recently passed through portions of Orange, Alamance, Guilford, Davidson, Rowan, Cabarrus, Mecklenburg, Lincoln and Gaston counties, in this State, and the finest prospects for the largest Corn crop gathered for many years, present themselves everywhere. The corn on the up-lands looks as vigorous and luxuriant as the best low grounds usually do—and should no disaster happen, the barns of the farmers will not be able to hold the millions of bushels they will raise.—It is said in the up-country, that in the event of no misfortune to the crops, corn can be purchased in abundance there for 40 and 50 cts. per bushel.

The Wheat crop was not equal to that of last year, but owing to the great breadth of land sown this year in that grain, and the large amount of last crop still on hand, wheat and flour are abundant and selling at low rates. We saw some best family flour sold at $3 50 per bbl., and the opinion was that it would be lower still. So "flour fixins" will be in the reach of the poorest. North Carolina is the greatest country in the Union, after all.

☞ We are again placed under obligations to our friend W. A. Faison, Esq., of Sampson county, for other subscribers to the Planter—making, we believe, nearly *seventy* he has sent us. From his letter we take the liberty of making the following extract.—The letter is dated July 5th:

I see in the July number of the Planter, that you wished to know the address of the President and Secretary of the different Agricultural Associations. Dr. Thomas Bunting, of Clinton, is our President, and Dr. E. L. Perkins, of Clinton, is our Secretary.

I am glad to see that life membership has been established in the State Agricultural Society, and I hope the farmers of the good old North State will not hesitate in becoming life members. We have established life membership in our Sampson County Society. Twenty dollars is the fee for a life membership. At a regular meeting of the Society last Saturday, we got twenty-six life members, and by the next meeting will be able to get several more, I think. The privileges granted a life member in our county are these: He and his wife, and all the females and the minors of his family enter the Fair Grounds free of charge. At the death of the member, his widow, (as long as she remains a widow) and the minors of the family and the females of his family enter free of charge.

We have fine weather now, and the crops are looking much better than they did a while back. Our corn crops are so badly missing that it will be impossible for us to make first rate crops on our bottom lands. Our cotton crops are much better at this time than they were last season. Hoping to be able to send you some more subscribers soon, I will close, by wishing you much good luck in your glorious enterprise.

Yours, very truly,
WM. A. FAISON.

*For the N. C. Planter.*

## Rust in Oats.

*Messrs Editors:*—The oat crop of the present season throughout the greater portion of Western North Carolina is almost a total failure. It was attacked about the period that the grain was in the boot with what appeared to be the common *rust*, the effect of which was not only to check almost entirely the further growth of the stalks, but in a short time to cause it, apparently by the absorption of its strength, to weaken and fall down. It is a new disease in this section, so far as oats are concerned, as our oldest farmers say they never heard of it before; and what adds to the misfortune is the fact, that stock will scarcely eat the oats at all, thus affected. I had a field on which between 60 and 70 bushels of seed were sown, and as soon as I discovered the yield would not be sufficient to pay for the labor of harvesting the oats, I had my hogs turned into the field, supposing that I would at least secure some benefit from them in that way; but to my utter surprise, the hogs would hardly touch them, preferring to eat the grass and weeds which were beginning to spring up. I have observed, too, that many of the heads have no grain in them, and that in many others, the shuck, instead of enclosing a grain, is filled with smut.

Can you, Messrs. Editors, or any of your numerous correspondents give us any information on the subject?—particularly as to the cause of this disease; whether or not there is any preventive or remedy for it; whether oats thus affected are injurious to stock to which they are fed, and also whether or not they will answer for seed. Satisfactory replies to these queries will greatly oblige many farmers in western North Carolina, as well as your obedient servant, P.

Caldwell Co., July 21, 1858.

Remarks.—Hoping that some of our scientific Farmers will respond to the above, from our intelligent correspondent, we will simply give a few *facts* on the subject of "Rust in Oats," which we have gleaned from Agricultural works and our exchanges. It is contended by many of our most intelligent farmers, that although rust in oats be a new thing among us, it is no doubt the same thing that often proves so destructive to our wheat crops. Examination through the best glasses, has forced the unanimous conclusion, so far as we have seen, that rust is a fungus plant, which attaches itself to the blade and straw of wheat and other grain, and extracts the nourishment.

The following extract is taken from "Baxter's Library of Practical Agriculture." He says:

"The "Red Rust,' 'Mildew,' 'Blight,' or 'Red Gum,' (*Puccinia graminis,*) first attacks the leaf, and then the straw of wheat, just at the time of blooming, thus continuing until the period of maturity; and, like many other practical plants, destroys the vigorous growth and energy of its supporter. Some 40 years ago, Sir Joseph Banks published the result of his observations, founded upon ocular demonstrations, that the disorder in wheat was a cryptogamous or fungus plant, attacking the stalk, the seed of which were wafted to, and nourished by the straw. The attack generally takes place after much wet weather, between the blooming and ripening of the seed, which will open the pores of the surface of the straw, ready to admit the sporicles or fungus seeds; yet, notwithstanding this information, and the accumulated observations of other vegetable Physiologists, many of the cultivators of the earth will say that blight is something generated in the air, 'and comes with a thick mist, and cannot be seed.'"

"The Mildew," (rust) says Sir Humphrey Davy, in his Agricultural Chemistry, "which has often occasioned great havoc in our wheat crops, and which was particularly destructive in 1804, is a species of fungus, so small as to require glasses to render its form distinct, and rapidly propagated by its seed.

"This has been shown by various Botanists; and the subject has received a full illustration from the enlightened and elaborate researches of the President of the Royal Society.

"The fungus rapidly spreads from stalk to stalk; fixes itself in the cells connected with the common tubes, and carries away and consumes that nourishment which should have been appropriated to the grain.

"In general, wet weather is most favorable to the propagation of mildew, fungus, rust, and the small parasitical vegetables; dry weather to the increase of the insect tribes."

Dr. Blake, also, in his Botany, attributes rust in wheat, to the same cause.

And we have seen it suggested in one of our exchanges, that the animalculæ which has been discovered this year on the oats, by means of magnifying glasses, have possibly collected there for the purpose of feeding on the fungus, but that they themselves were not the cause of the evil. And an able writer says he knows this to be the case, that in many instances insects will collect in innumerable quantities to devour food that is agreeable to their tastes. But, he says, "whether the disease is of animal or vegetable origin, it is very desirable that the true cause be ascertained; though it is not probable that, in either case, a remedy can be found. It seems to be produced by a peculiar state of the atmosphere, over which human agency can have no control. If it be of vegetable origin, and capable of producing its kind by seed, it would be well for farmers to wash their grain thoroughly, whether wheat or oats, before sowing. I have been feeding stock on rusted oats, for some time, and have seen no injurious effects follow."

The Editor af the Southern Homestead says, however, that he has looked in vain, this year, for the vegetable parasite on the oat, but instead an army of worms was discovered. He says, "with the aid of glasses that magnify six hundred times, no substance like foreign vegetable matter was dis covered on the blade or the stalk of the oat. The worm, after leaving its discolored cell, was invariably found upon the more fresh and healthy portions of the blade, so that we are confident from the evidence of our senses that our correspondent is wrong in conjecturing that the animalchae has collected to feed upon fungous substance or vegetable parasites. Although the facts in the case of this singular phenomenon seem not to harmonize with scientific research, is it not possible, when all the circumstances of the growth and stage of the oat-plant, weather, temperature, &c., are taken into the account, that the matter may be accounted for at once satisfactorily and in harmony with the universal laws of nature? May not the very cold "snap" which occurred on or about the 11th of May and which was general from Northern Kentucky to central Mississippi, have so affected the oats, then in a very tender state, so as to produce stagnation in its juice or sap? Or may not the excessive rains of May, followed by the hot days of June have had some agency in the matter? We throw out these suggestions with the hope that scientific men will investigate the subject and give the results of their research. It may prove of great benefit to farmers. It is by the aid of such investigation that many valuable discoveries have been made and information obtained of invaluable service to the farming community.

*For the N. C. Planter.*

## Live Fences.

Hedges, or live Fences, are the cheapest and certainly the most durable of any fence used. The Osage Orange is the best, undoubtedly, we can use for farm purposes.—In three years from the time of planting, the fence of wood which has been a protection to it, may be removed, leaving a handsome Hedge. The plant may be bought at the nurseries at from 10 to $15 per thousand. One thousand, if good strong plants, will make three thousand feet of fence, and such an one that no animal can penetrate. The best plan to make this fence is, to take out a trench two feet wide and two deep, and if the soil is not good, manure must be applied. Swamp muck, mixed with sand and turned over two or three times, we have found to succeed admirably. The roots, if injured by taking up, must be trimmed with a sharp knife, and all bruised ends taken off; the head also shortened to within six inches of the ground to induce them to form a bushy appearance. They will grow very rapidly and are perfectly hardy.

In the State of North Carolina they require shortening back every fall, to induce them to remain bushy, thereby making an impenetrable fence, and one that cannot be easily climbed over or broken through.—South of, and in Virginia, every farm might be fenced with Osage Orange. What a beautiful appearance would it present. Mauling rails in a few years would cease to be en employment on the farm; the landscape would be perfectly beautiful. The farmers of Europe who have no plant so good or capable of resistance as the Osage Orange, fence with Hedges, using the hawthorn for this purpose; and it is much more rare for cattle to break into the fields than here with our wood fences. Live fences, we feel perfectly satisfied, will when grown on a limited scale, soon induce those thus planting to fence in the whole farm. All they need, after planting, is annual trimming, and no wood fence is equal to it, as the older it gets the more impenetrable does it become, which is quite the contrary with the best wood fence ever put up. Farmers, study your own interest and save money by using this fence. We intend to plant a hedge this fall, and hope to convince those who may be skeptical, of the advantage of using live fences. Those who are acquainted with the plant I know will not be so.

HAMILTON & CARTER,
Florists and Nurserymen,
Raleigh, N. C.

Cheerfulness sits at the farmer's board.

*For the N. C. Planter.*

WALNUT COVE, N. C., July '58.

MESSRS. EDITORS:—In your May number of the Planter, was an article from "A Planter of Wake," requesting information relative to the management of Hogs and Tobacco; and *particularly how to make low-ground Tobacco desirable for the manufacturer.* I have waited, hoping that some one better qualified than myself would respond; but as they have not, I will endeavor to give the *particular* information desired. And as I believe your correspondent to be one of Wake's most intelligent and successful Hog and Tobacco raisers, I shall claim from him through the Planter, his experience on these subjects.

To make low-ground Tobacco desirable for the Manufacturer, it is necessary for it to be cured yellow. Until very recently, the idea has prevailed, that Tobacco yellowed before fire is put under it, could not be cured yellow. This is a mistake, and I will endeavor to explain the treatment in a few words. As large Tobacco requires more time to cure it than small, and sappy Tobacco more than that which yellows on the hill, you will at once see the necessity of cutting as near the same grade as possible, for the same curing. Do not put more than five plants on a stick, and have them at least twelve inches apart in the barn. Before housing put it on a scaffold near the barn door, just high enough from the ground to allow the tails of the Tobacco to rest, from 6 to 10 inches on the straw, with which the ground should be covered. As soon as the Tobacco gets sufficiently limber, crowd it on the scaffold and cover it closely over the tops and sides with leafy brush, and there let it remain until it yellows. If it should rain on it, open it on a higher scaffold and let it dry, and if not sufficiently yellow, again crowd it. When it gets nearly yellow, build a log fire in your barn and keep it hot one day so as to dry the ground and walls thoroughly, and at night remove the fire. The next day house the Tobacco, and put from nine to fifteen small fires made of charcoal, at equal distances from each other, over the floor. By hanging a Thermometer on a bottom tier near the centre of the house, you may keep the heat regular. For the first ten or twelve hours, raise the heat to 95 or 100°; then increase it 5° every fifteen or eighteen hours according to the size of the Tobacco, until the leaf is nearly cured, then increase it 5° every two hours until 165 or or 170° are obtained, and continue at that until stem and stalk are thoroughly cured. The fires should be kept up night and day from the beginning to the end. The walls of the barn should be made close to exclude the air, and if it has a tight roof, a space two or three inches wide should be left under the eaves; but if a common slab roof, no space will be necessary as they are generally sufficiently open. It would be well to have air holes under the bottom of the house, that could be opened or closed at pleasure, and during the two first days of firing, keep them and the door standing open most of the time.

In giving the degrees of heat and the changes, I may not be exactly correct, but by observing the following I think there will be but little difficulty in succeeding, as the best curers in Stokes County, have never used a Thermometer. The nature of Tobacco is such, that if fire is forced too fast in the beginning, it will cause the leaves to cure of a dark rusty or greenish color; or in a more advanced stage, if the heat is too great, there is danger of causing the Tobacco to sweat; which would cause large red splotches to come on the leaves; and if too slow (which I think is not often the case except when the fires are allowed to go out) there is danger of its drying up of the same color that it would in the sun or air. All of these things should be guarded against. If it should get in a sweat, which you can readily detect by frequently feeling the leaves, immediately pull down the fires and give it air freely by opening the door, &c. After it dries out of the sweat, you may proceed as before, but do not have too much steam. By observing these rules I think the fibre may be cured as yellow as the leafy part of the plant. If too much Tobacco is put in the house at one time, it is almost impossible to keep it from getting in a sweat.

With the hope that the above may prove profitable to your numerous readers, and particularly to my esteemed friend "A Planter of Wake," I now close. B.

*For the N. C. Planter.*

## Milk Sickness.

Messrs. Editors:—In the July number of the N. C. Planter. is an article headed "Milk Sickness.—Its Cause and Cure," which is taken from a communication signed "C. W." in an Illinois newspaper. This discovery, if true, is a most important and valuable one to a large section of North Carolina.—All the counties in our State, west of the Blue Ridge, amounting to ten in number, as well as many in East Tennessee and South-Western Virginia, embrace localities more or less subject to this dreadful poison. Its cause has hitherto baffled all efforts at discovery, and no certain remedy for its cure or prevention has been found. Remedies, proving successful in many instances under pecular circumstances, are known, but nothing like a specific has been discovered. If, therefore, the writer of the article above mentioned has made this discovery, he is certainly entitled to the thanks and gratitude of the people of a very large section of the United States, if not of other portions of the world, to say nothing of rewards of a more substantial character. It would, however, have been much more satisfactory if "C. W." had gone more into detail in describing the mode of administering his remedy, and told us how much "sulphuric acid" should be given at a dose, and in what way, to man and beast—how often repeated, if necessary, and other attending circumstances by which we should have been put in possession of all the information desirable for making a fair trial of its virtues. Hoping, Messrs. Editors, that through the columns of your valuable journal, or in some other way, this communication may meet the eye of "C. W." and that he will furnish the information desired in detail;

I am very truly yours, and will be his most obliged servant, S. F. P.

Caldwell co., July, 1858.

[We hope the above communication may attract the attention of some of our Correspondents or Exchanges, and the information solicited thus be responded to. We will take it as a favor for any of our cotemporaries to give us information in the matter.—Eds. N. C. Planter.]

We notice that a dreadfully fatal disease is prevailing among the cattle in Southern Georgia, but whether it is the same complained of by our correspondent, we do not know. We give the following, however, as it may prove useful—at all events, the remedy can be tried:

The Savannah Republican says the following is a remedy for this very prevalent disease, and which has been used with success in the lower portion of this State and Florida:

"Copperas and water, a strong decoction, half a gallon, to which add half a pint of spirits of turpentine—used as a mouth wash, once a day for two days, and drench with one pint of salt and water."

---

*For the N. C. Planter.*

## Cabbages.

Messrs. Editors:—At your suggestion I drop you one or two more hints on cabbage raising. Those who fail to raise good cabbage either neglect to break their soil deep, or use coarse manure, or fine manure in too small quantities, or set their cabbage plants too near to each other, or fail to keep their plants clean after they are set.

First then you see it is expected that the ground should be broken deep, twelve or eighteen inches. It may be drilled with a spade or with a plow. The drill should then be filled with fine, not coarse manure. A compost made by using two loads of swamp mud and one of well-rotted stable manure is good. The land being previously sprinkled with ashes and salt, or these articles may be used in the compost. If the land is stiff, the drills should be four feet apart, if sandy land, five feet apart. The plants should be set two feet apart in the drill, and after a stand is insured, every other one should be removed, making the space between, four feet. Cabbages must have distance to do well. The lighter the soil the greater distance is required, that they may have room to get moisture from the soil around them. They must be kept clean, for cabbages and grass were never known to grow together. The whole secret consists in a deep and clean system of cultivation, allowing sufficient space, and having an abundance of well prepared manure, not coarse litter.

We may have cabbages every day in the year, if we will try. Sow in February, sow in June or July, sow in September or October. In hot weather the seed-bed must be kept from the sun. By this method we will have Spring, Summer and Fall plants. Our Spring plants will make Summer cabbage; our Summer plants will make Fall cabbage; our Fall plants will make Winter cabbage, and from our Winter cabbage we may save our own seed the next spring. The annual importation of cabbage seed is a folly on our part, in which we are not as wise as we should be for our good.

To prevent lice in the cabbages, see that the old seed stalks are removed from the garden early in the spring, for it is in these old stalks that the evil begins. On the first appearance of the lice remove the infested leaves, but if they spread, drench the plants with suds of whale oil soap and while yet damp sift over them some dry ashes or water slacked lime. And in pursuing this war, vigilance is required.

" If at first you don't succeed
Try, try again—
If you would at last prevail
Try, try again."

A soap made of train oil and potash will answer the purpose.

Plow very deep, manure well with fine manure, give good space, keep clean, always have a seed bed in preparation. These are the maxims for the cabbage grower who wants cabbages all the year round."

P.

## State Fair.

We have received from the Secretary, W. W. Whitaker, Esq., copies of the premium list of the next State Fair, to be held in this City on the 19th, 20th, 21st, and 22d of October. The Hon. Thos. L. Clingman will deliver the annual address. The public may, therefore, anticipate an able and highly interesting address on the occasion.

## Prizing Tobacco.

We give several articles in this number of the N. C. Planter, on Tobacco, an article extensively cultivated in many portions of our State. The one from the Southern Farmer, we are told by the Editor, is from the pen of a Petersburg Commission Merchant, formerly a planter, and who speaks from experience derived from both pursuits. Considering that tobacco is one of our staple crops, it may well excite surprise that a large portion of it should be brought to market in a condition not at all creditable to the skill of the planter. But that such is the fact, will be evident to any spectator who attends the breaks at the warehouses for a few days.—Besides the several evidences of mismanagement which our correspondent has specified, such a degree of heat is sometimes discovered—caused by too much moisture—as not only to impair the quality of the article, but almost to destroy its value. The loss of course falls on the planter, which might have been avoided by a little more care in the handling.

Many persons have taken to growing tobacco within the last year or two who probably never raised a plant before. This may account for much of the bad tobacco which has been sent to market—for to make a successful planter requires an experience of several years. Nevertheless, a proper degree of care will overcome many difficulties in the art; and if a first rate article cannot be produced at first, it is in the power of an intelligent man to produce at least a respectable one. It yields more ready money than any other crop, and after the planter has gone to the trouble of growing it, he should not relax a moment in his diligence in preparing it for market.

## Editorial Changes.

We have inadvertently omitted to notice the change which has taken place in the editorship of the *American Farmer*. Mr Sands, who has conducted it for so many years as to have become a veteran in the cause of agriculture, has retired from his chair, and relinquished it to N. B. Worthington, Esq., who has been associated with him.

for several years. Mr. W. is a ready writer and an experienced farmer, and will doubtless keep up the journal to the standard of merit it has so long occupied.

The *Southern Planter* has just undergone a similar change. The July number contains the valedictory of Mr. F. G. Ruffin, and the Planter passes into the hands of Dr. Jas. E. Williams, of Henrico county. Mr. Ruffin is one of the most vigorous writers connected with the agricultural press, and has given a character to the *Planter* which it never before enjoyed. We hope his place may be fully supplied by his successor, to whom we tender our best wishes for his success.

The American Agriculturalist, the largest of the monthlies, and published at New York by Orange Judd, A. M., is issued also in the German language, for the benefit of the German population in the United States, which amounts to several millions. The matter and illustrations are the same as in the English edition. Price $1 per annum.

Scientific Artisan.—We have received the first number of this paper, published weekly at Cincinnati, devoted to Science, Art, Discovery and Invention—a magnificent field of labor, in which there cannot be too many workers. It is embellished by a number of highly finished engravings, and is published in quarto form at $2 per year, under the patronage of the American Patent Company. It is conducted with ability, and will prove an important acquisition to all persons connected with the mechanic arts.

## The Wheat Crop—The Market.

Nearly all the accounts we have received, says the Petersburg Southern Farmer, represent the crop of wheat as being the lightest that has been harvested for a number of years. It is deficient in quality as well as quantity. The rust prevailed over a large portion of the State, while in some districts the joint worm and other insects were numerous and destructive. Added to all this, the ears were not as well filled as usual.—What part of a fair average has been gathered, it is too early yet to determine with any reasonable conjecture. We have heard a few farmers say that their crops, though falling short of an average yield, were yet better than they expected. On the other hand, an old farmer assured us a few days ago that, with one exception, it is the most indifferent crop he has ever had.

In a few weeks, however, the deliveries of grain will indicate more accurately the quantity and quality of the crop. As yet, very few parcels have been received in market, and none weighing over sixty pounds to the bushel. Though this is the legal standard, it is no uncommon thing for good wheat to weigh 63 or 64 pounds, and the heavier it is, the higher the grade as to quality, and therefore the higher the price it commands.

Nor is there any thing flattering to communicate in respect of prices. Only a very small quantity of wheat has been brought to market, the best of which has not sold for more than $1 25. When it comes in more freely, as it will do in the course of the next week and the week after, even that price cannot be maintained. Every one, in fact, seems to be anticipating very low rates.

*For the N. C. Planter.*

## Fencing.

Mr. Planter: It seems to me that this subject has been too much neglected, by the farmers and law-makers of our State. The present system of fencing in the crops, and turning out the stock, as pursued in N. C., has cost the State an enormous amount that might have been avoided by fencing in the stock instead of the crops. As proof of my statement I will make a calculation of the cost, of the present system, to the small county of Person which is but 20 miles square, making 400 square miles. If we allow two and a half yards to each pannel, there will be required to build a fence one mile long, ten rails high with stakes and riders, 9152 rails; which valued at one and a half cents each, including trouble of making and keeping the fence in good repair, amounts to $137 28.

I doubt not, that it will be admitted, that a well regulated farm of one mile square, or 640 acres, will require 7 miles of fence. (4 of outside and 3 of cross fencing.) But the outside fence being generally made to enclose farms on either side of it, will reduce this to about 5 miles to each 640 acres.—And as the county might be divided into 400 tracts of this size, it will be found necessary to keep 2,000 miles of fence; which multiplied by $137 28, makes $274,560. Now suppose it necessary to keep one third, or 85,333 acres of this land out of cultivation, to supply rail timber; this valued at $8 per acre, gives $682,664; to which add cost of building fence, and we have as the whole cost $957,224.

We will from this deduct such expenses as would be necessary, if the system were so changed that each farmer be required to keep up his stock. Should there be proper attention paid to raising clover and grass, I imagine one-fifth of the fence now in use would be amply sufficient to make all the necessary pasture fences for stock. This, then, would leave us 400 miles of fence still to be kept up, at an expense of $54,912. Notwithstanding we now have a use for but one-fifth the rail timber we formerly did, I will allow one third, or 28,444 acres of the land now in woods to remain, to supply the farm with timber; this at $8 per acre, amounts to $227,552, to which add expense of making fence, and we have as the cost of the plan that I propose, $282,464, which deducted from the cost of the plan now pursued, will show a nett saving of $674,780 to the county of Person. And it must be borne in mind, that at each succeeding time that it becomes necessary to renew the fence, the enormous tax of $219,648 will be again heaped upon us: this being the difference in the cost of building fences under the two systems. And there is also an annual loss of $27,306 72 on the land that you are now unable to bring into cultivation. Perhaps there is not more than half the quantity of fence kept up in the county, that I have supposed should be, but this does not affect the calculation at all; if the position I have assumed be correct, it should be built without delay; for every man who has any experience in farming, knows it is much more profitable to cultivate land that is well fenced, than that which is not, as the damage done your crops by stock, would far overbalance the cost of building the fence.

Some may oppose this new plan because they prefer turning their stock upon the woods range. (Here let me ask, is it your own woods you wish to turn your stock into, or your neighbors?) If it is your own and you prefer that your stock run in the woods, we raise no objection; but would advise you as a matter of economy, to fence in your woods for pasturage; your timber is at the place you want the fence, and there would be no loss of time in hauling it several miles, as you would have to do were you to fence in your farm, nor would there be any use in the woods for cross fences, which would be a clear saving of no inconsiderable amount.—Neither would your stock, (being confined by your fence) continue to go astray, and tempt the vagabonds of our land who are too lazy to work for an honest living, to take them into quarters. But if you have no wood land, I ask in the name of morality and honesty, what right have you to turn your stock upon other people's land, to become a pest to the community.

But I think there is a much better plan of keeping stock, than in the woods, and at less trouble and expense. If you will inclose two lots of ten acres each, and sow them down in grass and clover, I think I may safely say, the stock raised on those two lots will be worth at the end of two years, fifty per cent more than what you now raise on 500 acres of woodland.

A few days ago one of my neighbors told me that on an enclosure of 12 or 15 acres, there were 2½ or 3 acres well stuck with clover, upon which about 40 hogs, 3 colts, and 3 milk cows were turned early last spring, and had remained there ever since, subsisting principally upon the clover, and were looking fat and nice; but that, one of his hogs last spring, being, as many of our farmers are, desirous to try the woods range, betook itself thither; and when it returned a short time since, it was so poor and light, that with a thick tar plaster it might almost have been stuck to the side of a wall.

There is another fact in connection with this subject that is worthy of grave consideration. Many of the best and most enterprising citizens of the State, have, by the present bad system of fencing, been driven from our midst, to seek homes in new States, because by the continual demand for rails, their timber had been exhausted, and there was left them no means of protecting their crops against the ravages of their neighbors' range stock. And when we look around us, at the great quantity of worn out land, the question naturally arises, What has caused this exhaustion? My answer is this: The owner has been forced to lose about one-twelfth of his time in the useless employment of making fences, which should have been spent in raising manure to enrich his land. It may be, that the State at large, is not ready to adopt the change; but there are many counties, or portions of them, that would gladly relieve themselves of this heavy burthen, were some suitable plan proposed by which it might be done. Now, I would suggest, that around the counties or districts that favor a change, there be run a general outside fence, and that every man in the enclosure be required to keep his own stock. And to our next Legislature these districts should make an application to be incorporated; that they may make such laws as would be necessary for their mutual protection.

Will not the wise legislators of North Carolina adopt some law for the better protection of the property of her citizens, that they may no longer be forced to leave the State of their nativity? North Carolina should no longer be contented to furnish materials to build up other States, but should use those materials in her own borders, that she may occupy an honorable position among the sister States, and that her sons may ever glory in her good name.

ALBERT BAILEY.

Woodsdale, N. C., July 19, 1858.

◆

## Fattening Hogs.

A correspondent of the Southern Farmer writing from Halifax county, N. C., says:

"I have lately learned one thing with regard to wheat bran or "shorts," which may not be uninteresting to your readers. It is about the best food for hogs that can be given them. I killed this winter about twenty of the finest hogs I have seen anywhere, and throughout the entire summer and part of the fall fed them on nothing but shorts.—They were in good order all the time, but in October or November I put them up and changed the food to shipstuff, and just before I killed gave them a little corn. No one killed fatter hogs anywhere, and the lard made from them was very abundant. Mr. Paschal Thomas, of Greenville, Va., first called my attention to the fact of the rapid growth of pigs on this food, and upon a fair trial I am sure I never saw anything equal it. Whether it enables the sow to afford more nourishment, or being soft and fine may be more readily digested by the pigs than other food, I cannot undertake to say, but certain it is, they keep in better order, and grow faster than on any other food I ever tried, and they always have the appearance of improved stock. Hon. M. W. Ransom, after becoming satisfied of this, has determined to try it on his farm."

◆

*From the Southern Homestead.*

## Smut in Wheat—The Remedy.

*Eds. Southern Homestead:*—I will state to your readers, what I *suppose* to be the cause of smut in wheat, and likewise, what I *know* to be a prevention. I have supposed that pure wheat, like various other productions of the earth, might degenerate and produce smut, or, that owing to some casualty, such as cold, heat, wet or disease, it might fail to blossom, and produce smut.—These causes, acting separately or conjointly, may be the first moving cause of smut, while smut itself, being an efficient agent in propagating its kind, becomes the continuing cause.

When I was a boy, I one day observed my father washing wheat to sow. I asked him why he did thus. He replied, to rid it of smut. I observed that, after he had skimmed off all the balls of smut from the first water, he washed it thoroughly in the second and third waters. I asked him why he washed it so much after he had taken off all the kernels of smut. He replied, that particles of smut, adhering to the wheat, will cause it to produce smut. Young as I was, I had imbibed the idea that smut germinated, and was too incredulous to relinquish my notion on the subject. To satisfy myself I took a number of balls of smut, rubbed them i my hand, and added a handful of the washed wheat. On one side of the field, where the pure wheat had been sown, I sowed what I had prepared, and, boy like, rolled it in with stones. At harvest, I had a fine crop of smut, while the adjoining wheat was entirely free from it. I then felt that inexperience should not be too confident.

In the course of time, I contracted with a gentleman to take charge of his farm.—When seeding time came, I could not conveniently obtain any other than smutty wheat for seed. My employer was not slow to condemn this "mess of smut." I told him perhaps I might be able to teach him a "thing or two," concerning smut. I washed this wheat thoroughly, sowed it, and raised excellent pure wheat. From the result of the first experiment, it appears reasonable to infer that smut does not germinate, but by adhering to the wheat, contaminates or diseases its roots and blades, imparts to them a vitiating principle, which prevents the head from producing a sound grain. This is proved, as there was no kernel of smut in the seed sown, and as there was nothing but pulverized smut in it, the smut must have been produced by some process similar to that above described. The result of the second experiment proves that if smutty seed be washed, smut will be prevented.

I have not the temerity to suppose that I can instruct the experienced. But as often as I see smutty wheat, or black bread, its result, upon the table, I am furnished with a demonstration that there are farmers who do not know there is a remedy. In fact, the very existence of smut, in any quantity, calls for something on this subject, and let this be my apology.

Now, if you have smutty seed-wheat, just take it and a couple of tubs, a bucket and a seive, to a brook or pool of water, and give it a thorough washing, through several different waters. If you will do this, you will no longer behold upon the table, the *black* loaf of *white* bread.

A Kentucky Farmer.
Christian Co., Ky., July 1, 1858.

Granville Agricultural Society.—We surrender a considerable portion of our first page to-day, that we may lay before the good people of Granville, the list of Premiums that is to be awarded at the 5th annual Fair to be held in Henderson on the 27th. 28th and 29th of October. Since the last Fair, a new site has been purchased, which is every way admirably adapted to the purpose for which it was selected and immeasurably superior in every particular to the old grounds. Excellent buildings have been erected, and we have no hesitation, from what we learn, in saying that there is no county in the State that possesses such capital grounds, etc., for the holding of annual fairs. We trust that the Mechanics Agriculturists, stock raisers and all branches of industry, will take a pride in their County Fair, and commence in time to prepare for its approach. We hope, too, that the ladies will send this year, all the varieties of their neat, tasteful and skilful handiwork. Let their needles ply, and their preserve kettles boil—let the shuttles move and the loom be kept busy, so that all who shall visit Henderson on the 27th October, may behold with surprised eyes, what an ingenious, thrifty and industrious set of gentle women old Granville can boast of.

*Oxford Leisure Hour.*

The Crops.—The corn crop in Granville never looked more promising at this time of the year than it does at present. If as good seasons should continue as we have had for the last two weeks, we doubt if the crop that will be made will not be unprecedented.—The tobacco is looking well, and the probability now is, that an excellent crop will be made. Tobacco is ranging low in price, but we notice the sale in Petersburg a week or two ago, of four hogsheads, belonging to Jno. Perry of this county, which brought respectively $8 25 and $9 for lugs, and $19 50 and 20 40 for leaf.—*Oxford Leisure Hour.*

*From the Southern Farmer.*

## Prizing Tobacco.

This operation, in preparing tobacco for market—than which there is none more important, from sowing the seed to selling the crop—does not receive that attention from the larger portion of planters to which it is justly entitled. Be the crop good or bad. the planters' profits are mainly dependent upon the condition of his tobacco when it reaches market. True, a planter cannot prize a good crop unless he first makes it: but a fine article may be so bungled over in prizing, put up in such order, so tangled and mixed by careless hands, as to be actually worth less by 50c. to $1 per cwt., than a more inferior one, properly ordered, straightened and well prepared for market.

The writer has been a close observer of tobacco sales for several years, and has seen a difference of $1 to $2½ per cwt. produced, in crops grown on adjoining farms, cultivated in the same manner, and sold the same day, which could only be attributed to the manner of prizing.

The buyer must take the tobacco as it comes from the planters' hands; he can use only a certain part of it per day. That in safe condition he can keep for future use, and is always willing to pay for it full market rates; that out of condition he must keep until he can use it, and if he considers his interest, buys at what it will be worth to him when he shall be ready to work it up; thereby throwing on the planter the injury and loss in the tobacco from the time of purchase to that of manufacturing. This loss is considerable. The planter has to bear it. It is right that he should. He has no cause to complain of the manufacturer. If he feels like doing so, let him come here in September or October, and walk into one of our large factories, and take a look at a hogshead then being pulled up, bearing his own name on its head, which he sold in the spring. We presume he would then feel rather more sympathy than blame for the manufacturer, and congratulate himself that he and that tobacco parted long ago. But planters can remedy this evil. It is useless for them to talk about bad seasons for *striking*, bad winds, cold winds, too much or too little rain, &c. This will not exhonerate them from the duty they owe themselves. These bad seasons are not universal. They do not affect every planter; when they do we shall believe in them. There are planters who always manage their crops properly, in defiance of too much season, too little season, or any season at all. They are men of reputation as planters, and well do they sustain it. Examine their crops year after year, and they will invariably be found in good condition, and will always bring the highest prices. How is this done? The answer simply is, that they give every attention to the ordering and prizing their tobacco. To do this it must be straightened and bulked in soft order, and heavily weighted, which preserves the shape of the bundles and makes the leaves stick together. After remaining in bulk a few days it is again hung up on much smaller sticks than those at first used. These sticks should be drawn smooth, triangularlarly shaped, and sharpened at one end so as to run through the bundle just below the tie. The leaves of each bundle should not be separated after coming up from bulk. Let it hang until thoroughly dry. Then so soon as the outer surface of the bundles becomes soft enough to admit of careful handling, it may be taken down and bulked again with weights, and prized at leisure. No straightening will then be necessary. The inside of the bundles will be too dry to prize when first taken down, but after remaining in bulk a week or ten days, the order will be perfect. If the quality is poor, a little pure olive oil may be used with benefit. Much has been said about oiling tobacco. We only say oiled tobacco sells best, be the quality of the tobacco good or bad.—We do not advise the use of it. Planters must decide for themselves on this point.—Above all things, have the order safe, and weights heavy, and you will not go away grumbling about bad markets, low prices, &c., when you ought to blame nobody but yourselves. PETERSBURG.

# Horticulture.

**S. W. WESTBROOK, EDITOR.**

## Mulching.

We cannot press this subject with too much pertinacity upon the attention of our readers. The Southern Homestead says most truly, that the operation of mulching will be found beneficial to all plants, shrubs, and trees which are natural to cooler climates than ours; and to other plants which roots near the surface. The tomato is said to be greatly benefitted by it; if applied late, say after the middle of July, it would be beneficial in keeping the fruit off the ground, and would not be likely to prove injurious to the soil being thoroughly warmed. Earlier it cannot be advisable. Raspberry and currant bushes are proper subjects for mulching; so are rose and blackberry bushes. These all have many spreading and fibrous roots and like a cool moist surface, which can only be secured at all times by straw or leaf mulching. Apply it two to four inches deep and extend as far as the roots are supposed to spread. Fruit trees, if the surface is kept well stirred with the hoe during the growing season, do hot require mulching after the first two seasons. But late stirring with the hoe induces late growth. Mulch the latter part of July or first of August, and leave off hoeing. Some cultivators are in favor of planting in grass land, turning the turf with the spade once or twice early in the season for several feet around the trees and keeping ulched with straw four inches thick the en- re season. Where it is desirable to grow ees in grass plats, this is undoubtedly the ght treatment to give them.

◆

## Budding Fruit Trees.

The Southern Homestead of July 22d, says, pportunely, it is about time now to bud herries. Mahaleb will do any time during ie month as is also the case with the apple ad pear. Peach from the middle of Au- ust to the last of October. Stocks for bud- ing standard hight should be three-sights three-fourths of an inch at the point to be erated upon, which is also the point where ie head is to be formed. The operator will course be governed by his idea of the roper hight for the head of his trees.

If the variety to be worked is more hardy ian the average of the stocks used, it is far etter to bud low, within two or three inches the ground, for the newly set buds may protected from winter weather by em- nking if necessary.

An editor of one of our Horticultural ex- ianges says: that in budding trees with ie head already formed, set one or more ids in each branch, when of the proper size. i cutting the shoots for bud-sticks select ie best growth and cut off all the spongy or iripe portion, so far as to leave only promi- int buds under each leaf stalk, which need ot be left over one-fourth of an inch in ngth. Cut the bud out clean and smooth, ake an upright and transverse incision in e stock to receive it and insert. Tie in ith a good bandage to protect it from rain id air. The bandage should be removed in o weeks if of strong material; if of strips corn husk, it may be neglected without jury to the stock. Some fruit growers bud e apple early in the present month and ad down the stock within a week, starting e buds into growth before the severe weath- of Fall and Winter. This will do better rther South.

Should any buds fail to unite, the operation may be repeated, but set, of course, in a new place.

The best time of day to bud is late in the evening or any time of day in cloudy weather. Insert the bud, when it can be done, on the north side of the stock or tree.

◆

## Grafting the Grape Vine.

We have met with many experienced persons who have never seen the grape-vine grafted. The process is so easy, that thousands who are anxious to possess the newer varieties should especially take care of their old roots and insert scions of the new. No clay or covering of the grafted part is necessary beyond the natural soil, below which the graft is to be inserted. Saw off your stock and put in your scion with two or three buds, wedge-fashion, as in the cleft grafting of fruit-trees, and then cover up a few inches, leaving one or two buds above ground; where the stock is very large, and inconvenient to split, a gimlet hole, so made as to bring both barks together, has answered.—The sprouts of the old stock, as they spring up to rob the graft, must be pulled off.—Grafts often bear some fine clusters the first season of growth, and many more the second.—*Hort.*

◆

*For the N. C. Planter.*

Editor of N. C. Planter:—The heavy frost, and freeze, on the night of the 28th last April, made nearly a clean sweep from our mountain valleys in Western North Carolina of the richest promise of a fruit crop that we have ever had, and what invests the event with special interest, is, that it was accompanied by results that were at variance with the laws that the schools have taught in relation to heat and cold. Philosophy teaches us, that as we ascend into the atmosphere we advance from a warm to a cold temperature at a rate of one degree of N. L. to every 300 feet of perpendicular ascension, and our experience testifies to the same on ascending lofty mountains. Yet, nevertheless, the freeze of the 28th April, which reduced the thermometer in our low valleys to 28 degrees, converting our young fruits into ice, and leaving the green landscape of the day before, black and drear; yet the mountains which enclose our valleys from a horizontal line of 350 feet elevation, were unharmed, and while their base below that line, including the valleys betwixt them, seemed as if clothed in a black pall, yet from that line to their tops they were clothed in the freshest verdure, and all description of fruit trees which have the good fortune to be located in this vernal region, are now bending beneath a heavy crop of fruit. The past spring was not the first knowledge we have had of the existence of a well-defined frost line on our mountain sides, as it shows itself almost every year; and there is no observant individual residing in our valleys but what has witnessed it. Yet, from the fact that we did not understand what seemed a phenomenon so utterly at variance with our philosophy, we have planted our orchards in our low valleys, and consequently within the frost region, and whenever a freeze takes place late in April we lose our fruit crop; while the few small farmers who have located themselves on the high mountain benches, what few fruit trees they have, never have been known to fail of their fruit. We will relate an incident to illustrate how slow we are to be profitably taught by observation. We knew a poor man many years ago, who made him a small farm near the head of a brook, at the eastern base of the Blue Ridge, in Rutherford county, N. C. On the side of the ridge, at an elevation of 700 or 800 feet, there was a kind of mountain terrace, consisting of excellent land. This he cleared, formed, and planted it in peach trees. This was at a time long antecedent to that in which you, and others, have been making such a noise in the world on the subject of temperance. It was in the good old times when peach brandy was made in abundance, and heartily drank. Men at that day, dwelt peacefully under their own vine and fig tree, there being none of the Sons of Temperance to molest him. Well, this farmer of the mountain above named, in a few years, had an orchard that produced, perhaps, thousands of bushels of peaches, and as they never failed in their fruit, he had peaches in abundance, when there was none besides in any other part of the county. He set up a distillery, and in a few years, besides the support of a large young family, saved cash sufficient to purchase a valuable farm at $10,000. But what is passing strange, though he has raised a numerous, and generally respectable family of children, there are but two of them that have been known to drink to intemperance. But in regard to making, and locating an orchard, this man's example and experience was lost upon us, and coming from Rutherford, in sight of his orchard on the mountain, we came here to Macon county, and planted our orchard in a low frosty valley. And we do not know the first individual but what has acted in the same way, save in some case, where a man's poverty has forced him to settle on the side or top of some mountain.

We know one of these mountain farmers who has a high locality with a lofty mountain crest sheltering him from the N. & N. West winds. His fruit trees have never been known to fail, and they have fruited for over 20 years; and his climate and soil is so congenial to the growth of the foreign grape that they spread upon his trees in the wildest luxuriance, bear abundantly, and have never been known to rot. He is a happy fellow this year. In our low valleys the foreign grape will not do at all. We experimented with them for ten years before giving them up. But as regards good Apples, and that will keep through the second summer, we have made an acquisition of a variety by which we can "laugh Jack-Frost to scorn." It is a new seedling, we think from the seed of what is known as the never-fail Apple.—As yet, there is but one bearing tree of this fruit, and on the 28th April it had not put out the first bud. It is rather over medium size, smooth skin, with small thread-like stripes radiating from the stem, which is sunk in a deep cavity. These stripes become broader as they approach the calyx and unite, giving to the upper end of the fruit the color of a porter-drinker's nose. Its flesh is firm, crisp, of sprightly taste, and highly aromatic. In short, as an apple, we never expect to look upon its like again, in any other variety, taking its keeping qualities into consideration.

But, to return to the frost line on the sides of our mountains. We have during the past Spring given the phenomenon an attentive investigation, and for the first time, fully understand it. During one of the cold still nights that produced the frosts, it was our hap to cross a mountain that divided a couple of our small valleys. The air in the valley was heavy, chill and damp, but on reaching a certain height on the mountain we entered a warm dry air, and continued in it until descending the mountain on the other side to a horizontal level with that at which we entered it, and from this to the base the cold perceptibly increased.

The philosophy of the seeming phenomenon at once dawned upon our mind, and was simply this: Frost only takes place when the surrounding air is in a quiet state; the heavy damp air descending to the bottoms of the lowest valleys, displacing the warm and dryer air, which ascends, and forms its thermal strata upon its top, the higher atmosphere being too thin and light to support it. To have acquired the knowledge of this fact 20 years ago, would to us have been worth some thousands of dollars. We, in that case, would have located our orchard of 600 Apple-trees on a mountain terrace, near our farm, and above the frost line, instead of the valley, and by that means, the ensuing Fall should have had 2000 bushels of Winter Apples, whereas we shall have none at all.

To the patrons of your valuable agricultural journal who reside in an extended plane country, these suggestions can have no practicable value; but to the farmers, particularly pomologists, living amongst the mountains of Western Carolina, the advantages that will result by carrying them into practice will be incalculable.

S. McDOWELL.

Franklin, Macon Co., N. C., July 1858.

# For the Ladies.

## FLORICULTURE.

Box Edging.—Care must be taken not to allow any plants to overhang or cover up this edging; wherever it occurs the box will surely die, as it is very impatient of light.

Washington Geraniums, or Pelargoniums.—These plants have now done blooming, and should, if not already done so, be placed out of doors in a shady place; give them just enough water to keep them alive till the wood is firm, then cut them down, allowing them to stand in the same place, and have the same treatment a week longer; at the end of which, take them out of the pots, remove all the earth from the roots, and cut them back till they will have plenty of room to grow in a pot two sizes less than the one in which they have been growing; place them, after being potted, in a close frame shaded from the sun, sprinkle them once night and morning; in fair weather sprinkle them till the soil is moist, keeping it so all the time, but not saturated with water. The fancy kinds are very impatient of wet, much more so than the selfs. After they have well broken or grown some two inches, shift them into a pot one size larger, thinning out the shoots to as many as your judgment tells you; the plant will grow strong and produce fine flowers. Manure water may be applied with benefit once per week, taking care it is not too strong. It is better to have it too weak than too strong, for if a plant once suffers from manure water too strong, it can never be recovered unless by those well versed in the managing of plants, and they are not likely to get them in this way; for the directions will be given when the plants should have grown as far as herein stated.

Dahlias should have copious supplies of water in dry weather; the earth must not be very rich, or in this climate they will n bloom well. There are many beautiful kinds, without which our gardens in the fall look very meagre. This is undoubtedly the finest fall flower we have, and with proper cultivation, is very attractive.

Greerhouse Plants, may have the same treatment as the previous month. Do not allow them to suffer for water. Sprinkle the Camelias over head morning and night, also Cinerarias ; keep them in a shady place and look well to the drainage as they will soon look sickly.

HAMILTON & CARTER,
Florists, Raleigh, N. C.

# Mechanical.

## Mechanics.

We join heartily in the remark of the Scientific Artisan, that no country has greater cause to be proud of its mechanics than the United States. In the pursuits of mechanism thousands have won for themselves names that will never be forgotten; and our list of most illustrious statesmen shows that very many of those who have risen to the highest distinction were educated to gain their bread by mechanical labor. He is, in every sense of the word, a creator—bringing something into existence which did not before, in that form, exist.

By his energy and industry our country has been belted with iron roads, and the waters made to ferment with ships, steamers, etc. Cities, under his intellect, have, as it were, sprung into existence at the waving of his magic wand. The hum and buzz of his machines are heard singing their monotonous songs in every city and village, each proclaiming the majesty of labor. We honor and respect the Mechanic, and cordially invite such as desire to express their opinion on the Science of Mechanics to furnish us short essays, and whenever we can do them a favor we are in readiness and willing.—One object of this paper is to protect the rights of Mechanics and Inventors, and if we fail to do so, it shall be by no intentional neglect of ours.

The Scientific American says that the simplest and cheapest way to cool a room is to wet a cloth of any size, the larger the better, and suspend it in the place you want cooled; let the room be well ventilated; and the temperature will sink from ten to twenty degrees in less than an hour. During such a torrid term as we have had, this would be worth trying.

I OFFER AT PRIVATE SALE A TRACT OF LAND consisting of 230 acres, near the town of Lexington and within one mile of the Depot, with a good dirt Turnpike Public Road leading to the Main Street, 25 or 30 acres of which is the richest Branch bottoms, with a deep and capacious ditch to carry off surplus waters, and most of it in grass for grazing and mowing; upwards of 50 acres are in the heaviest white-oak, red-oak and hickory timber. The rock are Trap and Greenstone, the soil a dark clay loam, and of excellent quality. It has on it numerous Springs of the best water, and is of the best quality for Wheat, Tobacco and Grass, and is capable of being made a superior Farm.

Also, a Tract of 200 acres, lying two miles East of Lexington Depot, through which also runs a public road. This consists entirely of wood land, pine, oak and hickory. It is within a half a mile of a Saw Mill on Abbott's creek, with an excellent road to the Saw Mill. The timber is of excellent quality and the soil a good sandy loam, will make a good Farm, and is considered of excellent quality for Tobacco. The prices asked for these lands, considering their convenient distance to a Railroad Depot, must offer great inducements to purchasers.

W. R. HOLT.
Lexington, N. C., August 1858. 8—4t.

FOR SALE,

I HAVE NINE NORTH DEVON YOUNG BULLS, and as many HEIFERS for sale. They can be selected by the purchaser now, and I will pasture them until the proper time of delivery, on the 1st day of November next, or I will deliver them at the State Fair. I will have but a few on exhibition at that time. Also a few South-Dower and Grade South-down and Leicester young BUCKS.

Apply soon.

W. R. HOLT.
Lexington, N. C., August 1858. 8—3t.

## "THE SPIRIT OF THE AGE,"

**A Large Weekly Family Newspaper,**
IS PUBLISHED IN RALEIGH, N. C.,
**BY A. M. GORMAN,**
*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*

---

# 100.000

## CHOICE FRUIT TREES FOR SALE,

## BY WESTBROOK & CO.,

AT THE

## West Green Nurseries and Gardens,

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

### 30 Bushels

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

---

## W. W. DINGEE, & CO.,

YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore at the prices named.

| | |
|---|---|
| An 8 horse power, including thresher and separator, | $165 |
| A 4 horse power, including thresher and separator, | 150 00 |
| A 2 horse railway power, including thresher and separater, | 145 00 |
| A 1 horse railway power with thresher, | 125 00 |
| A fan that will clean grain at once running through, | 25 00 |
| A grain drill with grass seed-sower attached, | 75 00 |
| 2 or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, write to

W. W. DINGEE, & Co.,
York, Pa

[6—6t.]

---

### FOR ONLY $1.

ON the receipt of $1, will be mailed to any person a recipe of a remedy for Horses, while suffering with Botts or Grubs, which was never known to fail to give ease in their greatest agony, if given in time. Many valuable horses have been saved from an untimely death by this remedy, and if given as advised, and it fails, the money will be refunded. No person who has a horse should be without this recipe. Other remedies will be added, which will be conducive to health and thrift, and a great preventive of distemper, which horses are subject to. Address R. M. BROWN, the P. M. of New Hill P. O., Wake county, N. C.

March 2, 1857. 51–3m

---

### Read ! Read ! the following :

We the undersigned have used and known used the Receipt advertised by Robt. M. Brown, Esq. for the cure of Bots or Grubs in horses, and consider it the best remedy known, for that disease. Indeed, we have never known it fail giving relief in the very first instance, even when horses were suffering the severest agony. And the remedy is quick and effectual. For the benefit of every body, and especially for the benefit of that noble animal—the Horse—we recommend all to procure this valuable Receipt. We have known Mr. R. M. Brown's remedy to be used in very many instances, and never without effect. In some cases it has accomplished astonishing cures.

J. L. BENNETT, T. B. HOLLEMAN,
P. R. JONES, JOHN BENNETT,
EDWIN HOLLEMAN, of Wake County.
JOHN R. WARD, A. P. STROUD,
D. M. DURHAM, of Orange County, N. C.
JOHN C. BURGESS, WM. H. BURGESS.
Randolph County, N. C.

New Hill, Wake county, N. C., Sept. 1857.

# PROSPECTUS

## OF THE

# "North Carolina Planter."

The present is the eighth number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

WILL THEY DO IT ?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ POSTMASTERS and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

August, 1858.

SEPTEMBER NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO

THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

**A. M. GORMAN**, Publisher, Raleigh, N. C.
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., SEPTEMBER, 1858. NO. 9.

## Regulations for the Approaching N. C. State Fair.

1. All members of the North Carolina State Agricultural Society will be furnished with a badge of membership, upon payment of the annual tax of $2, and will be required to wear the same during the Fair. This badge will admit the ladies of his family and children under eighteen years of age during the Fair.

2. Agricultural Societies and Institutions from other States are invited to send delegates. Such delegates will be presented with a complimentary card.

3. All exhibitors who intend to compete for the premiums of the Society, must become members of the same, and have their articles on the ground and entered at the Secretary's Office in Reception Hall, at or before 5 o'clock on Monday evening, Oct. 18th, without fail, so that they may be arranged in their respective departments.

4. The regulations of the Society must be strictly observed by exhibitors, otherwise the Society will not be responsible for the omission of any article or animal not entered under its rules.

5. No article or animal entered for a premium can be removed or taken away before the close of the exhibition. No premium will be paid on articles or animals removed in violation of this rule.

6. All articles and animals entered for exhibition must have cards attached with the number as entered at the Secretary's office; and exhibitors in all cases must obtain their cards previous to placing their articles or animals on the Fair Grounds.

7. Those who wish to offer animals or articles for sale during the Fair, must notify the Secretary of such intention at the time of entry.

8. The Executive Committee will employ a day and night guard, and will use all reasonable precaution in their power, for the safe preservation of all articles and stock on exhibition, but will not be responsible for loss or damage that may occur. Exhibitors must give attention to their articles or animals during the Fair, and at the close of the exhibition attend to their removal.

9. The awarding committee or judges, selected for the next Fair, are earnestly requested to report themselves to the chairman of the Executive Committee, at Reception Hall, upon the grounds of the Society on Tuesday morning, the 19th of October, 1858.

10. In no case can the judges award special or discretionary premiums; but will recommend to the Executive Committee any articles in their class which they may deem worthy of special notice and for which a premium has not been offered.

11. The judges on animals will have regard to the symmetry, early maturing, breeding and characteristics of the breeds which they judge. They will make proper allowances for the age, feeding and condition of the animals, especially in the breeding clas

ses and will not give encouragement to overfed animals.

12. No stock of inferior quality will be admitted within the grounds; a committee will be appointed to rule out all below a medium grade.

13. Animals to which premiums have been awarded must be paraded around the track, that the visitors may see the prize animals.

14. No person will be allowed to interfere with the Judges during their adjudications.

15. The several superintending committees will give particular direction to all articles in their departments, and see that all are arranged in the best order possible to lessen and facilitate the labors of the Judges in their examination.

16. The Superintendents will attend each set of Judges in their respective departments and point out the different articles or animals to be examined, will attach prize cards to the articles, or flags to the successful animals after the Judges' reports have been made up and delivered to the Chairman of the Executive Committee.

17. The Judges will withhold premiums on animals or articles in their opinion not worthy; though there be no competition.

18. Premiums of $25, or upwards, will be awarded in plate or money, at the option of the person to whom the award is made.

19. Stock brought to the Fair for sale, will have an enclosed lot adjoining the Fair Grounds assigned them, with water convenient, where they can be kept at the expense of the owner.

20. Articles manufactured in the State, when brought in competition with foreign articles, will take precedence, other things being equal, and the foreign article be entitled to a second premium.

21. Articles not enumerated will be entitled to discretionary premiums, at the option of the Executive Committee.

22. The Chief Marshal, with efficient aids, will be in attendance during the hours of exhibition, to keep proper order.

23. No exhibitor will be permitted to enter more than one animal in each of the sub-classes.

24. Animals, when duly entered, are well provided for by the Society, without charge to the owner, and cannot be removed from the ground, except by permission of the Ex. Committee.

25. All machines, implements, or other products of mechanical art, must be exhibited by their respective makers, or inventors, sr improvers, or their assignors, to or for whom only premiums for such articles will be awarded.

26. Every machine or implement offered for a premium, must be so designated or described as will serve to identify it to future purchasers, and also the selling price of the article must be stated and marked on the labels and in the published reports of premium articles.

27. Efficiency, cheapness and durability will be regarded as chief excellencies in every machine or implement.

28. The track will be open for the trial of harness and saddle horses every day during the Fair.

29. A band of music will be in attendance each day, during the hours of exhibition.

30. An efficient police will take charge of the grounds during the night.

THOS. RUFFIN, Ch. Ex. Com.
WILSON W. WHITAKER, Sec'y.

*From the Southern Homestead.*

## How to Restore Worn Out Lands.

*Eds. Southern Homestead:*—I am but a plain farmer, and propose (if you think worthy of a place in your valuable journal,) to make a few practical suggestions on the all-absorbing question, (to the tiller of the soil) the renovation of our old fields.

That it is patriotic, that it is philanthropic, to do something for the soil, which maintains the life and supports the energies of the teeming millions who draw subsistence from it, none will deny. But will it pay to rejuvenate the soil? that's the question. Science has done much for agriculture. By the analysis of soils, and carefully noting atmospheric influences upon them, great leading laws have been discovered; great and important truths brought out. But to the great mass of cultivators, who never saw the inside of a Chemical Laboratory, these discoveries sound like nonsense, unless a practical application can be made of them which *will pay.* But if chemistry can do nothing more than suggest the application of the "guanos," the "phosphates," the "super-phosphates," the "poudrettes," and the like, then our hopes are blasted, and mankind will soon be without bread to eat, and clothes to wear.—It's all stuff, to talk about renovating a continent with the manure which might be scraped up on some *little* island away in the midst of the ocean, or some preparation fixed up in a "drug store." All this may do very well for the square rod, or the garden spot, but will not do for the square mile, and the millions of acres now being torn to pieces by the living energies of millions upon millions of cultivators. There is not a cultivator in the land who will not tell you that such a system will not pay, for general application. It is just the same way with barn-yard manure, muck, etc. I do not mean but what it is expedient and profitable to apply these, as far as can be, to the garden and "truck patch;" but they are too scarce, and the hauling and distribution too expensive for field purposes.

But, Messrs. Editors, I am digressing.—My object, in the outset, was to give a system which has been adopted by several experienced cotton planters in this county.—Say, for instance, the piece of ground to be improved is in cotton this year. At the last working, it is seeded down in rye. This working of the cotton should be deferred as late as possible, though any time after the first of August will do. The rye can be thoroughly incorporated and distributed by the use of "sweeps," "big shovels," or "harrows;" to be followed by the hoes, to shuffle through the cottton. This late surface-stirring will cause the cotton to retain its *forms* or *squares*, while the shading of the cotton will prevent the sun killing out the stand of rye. This period for sowing is selected because it avoids the necessity of stopping, in *cotton-picking* time, to do it.—Rye is selected only on account of the great abundance of straw which it affords. In the fall, even the poorest points will present the eye with a luxuriant covering of bushy-topped, strong rooted rye. When the cotton is picked out, (which is generally done by December or Christmas,) the sheep, colts and milch cows, are turned in on it. And to the man who believes there is music in the *bleat* of a sheep, the *low* of a cow, or the *neigh* of a horse, it will be a time of great pleasure. The grazing is essential to prevent it running to head before the frost is out of the ground, in the spring. Stock should be kept upon it 'till the middle of March, or the first of April, in this latitude; according to the condition of the rye or advanced state of the season. By the first of June, the heads will be in a milk state; at which time, hogs and other stock may be turned on it; thus affording a pasture rivaling even clover itself. Should it not be desired to turn in the stock so soon, it will wait any length of time without the least detriment to the rye, because the cotton stalks, left standing from the previous crop, will support the straw, which will have tumbled upon the limbs and interlocked in every way, preventing its getting on the ground and sprouting. However, having been pastured through June, July, and August, should, by the first of September, be turned over with a two-horse plow, wrapping up rye-straw, weeds, cotton-stalks, droppings of animals and all. This period is selected, because it does not interfere with the cotton or corn crops in any particular, whatever. At this time, there will still be an abundance of grain on the ground to afford another stand of rye.

The vast amount of litter which is turned under, even on the poorest spots. (for rye makes nearly as much straw on poor points as any where) prevents the ground from washing, leaving it loose and porous, therefore, pervious to rains, dews and atmosphere.

Thus is restored to the earth, not only the inorganic matter which came out of it, but a large amount of organic matter which it did not originally possess; but which, together with atmospheric influences, will go on, disintegrating mineral substances, changing their condition and relation, forming new compounds as food for plants, and capable of being assimilated by them.

In a word, this is the farmers' great LABORATORY. Here is where the analysis of his soil takes place. Earth, air, heat and water, constitute his aparatus, and though his "alimbic" and "crucible" lie hidden from the eye, they never cease their refining and ameliorating process; neither while he sleeps nor wakes. Nature, through this vast machinery, is striving to recuperate and build herself up; and in doing so, discloses to us the great secret, which is to assist her in hastening on the chemical changes which are necessary to fertility.

You now have another stand of rye. The scythe has never been in it; the crop has perpetuated itself; the only labor bestowed is a single plowing, and that at a leisure season, without the least interference with the general crop.

This system seems almost a natural one; of easy application, on a large scale; not involving the outlay of a single dollar, or the curtailment of a single acre's cultivation. Now, sirs, will it succeed?

Land cultivated for thirty years, and poor indeed, put under this system, brought a thousand pounds of cotton per acre, in 1856, and that too, when there was not a stand up 'till the first of June; and this year, onsimilar land, under the same system, there is one of the best crops in the country. It is unnecessary for me to run a parallel between this system and the one so commonly recommended. In one case the material is produced on the ground, and already evenly distributed, without one single human effort. On the other case, the phosphates and guanos will cost much money, besides the labor of its application. One system prevents the ground from washing, and keeps it loose; the other will not. One furnishes an immense amount of the very best grazing; the other gives none. The effect of one system is quixotic; the other is enduring. Will anybody take the hint and try it? "Farmers, wake up, and shake off the dew-drops!"

HAYWOOD.

Haywood co., Tenn., 1858.

*From the Vermont Stock Journal.*

## Hints to Buyers of Fine Horses.

Many persons who purchase and pay for good horses, are sadly disappointed with their bargains. Of course many bad bargains will be made. The really fine animals and the seemingly fine, to common eyes appear just alike. To the accomplished and practical horseman they are very unlike, and such purchasers are not easily deceived.—Still no man is beyond being sometimes overreached by an imposing animal in the hands of an artful jockey. This kind of imposition can never be wholly prevented, and must be endured.

But there are some causes of dissatisfaction with the buyer for which the seller is no way in fault. A horse, or a pair of young horses, are bought of a breeder or dealer, which probably have been used to light work on the farm, and to daily exercise. The buyer drives them a few times, and feeds them high. They are not bought for regular, steady labor, but for occasional use, when the owner has the leisure. After the novelty of the new horses is gone, they are consigned to the groom. They remain day after day, and sometimes for weeks standing on a hard plank, indulged with high feed and deprived of all exercise. The horse delights in motion; confinement he abhors. He watches the long days to have some one come to take him out and give him a chance to move.—The master very likely seldom sees him, and he is left to the mercies of the groom.

After a week of inaction he is ordered to be brought out for use. He has been fed high for a week, and it may be a fortnight, and his feet are hot and dry from standing on a hard dry floor; but he is a fast horse, and was perhaps bought because he was fast; consequently the owner must drive fast. He is driven in this state eight or ten miles at a rapid pace. He is covered with foam and panting for breath. The owner is surprised. He cannot imagine what makes the horse sweat so. He has been well fed, and has not been out of the stable for a week. He begins to think that the horse is tender and lacks a good constitution. When the horse returns to the stable heated with a sharp drive, how many owners see that he is carefully rubbed until he is thoroughly dry, and know by their own observation that the groom is faithful?

The horse with his fine spirit, high courage and boundless ambition will go till he drops dead in the harness. But whoever wants to drive fast must remember that in the first place, the horse must be prepared for it by daily exercise. Secondly he must not be driven fast after a full meal, and thirdly after being driven fast he must have the best of care. Horses for fast driving must not carry too much flesh, or they are much more liable to injury.

If you are the owner of a good horse, see him daily. A little practice will make it pleasant to you, and you will see how soon he recognizes you and loves to acknowledge your caress.

Be careful to whom you commit a good horse. A coarse brutal man is unfit to have charge of him. The horse is easily won by kindness to the most implicit obedience, while harshness and violence is very sure to spoil him.

L.

*From the Va. Southern Planter.*

## Surface Manuring.

"Who layeth on dung ere he layeth on plow,
Such husbandry useth as thrift doth allow;
One month ere you spread it, so still let it stand,
Ere ever to plow it ye take it in hand."

*Tusser's February Husbandrie.*

Prof. Voelcker, of the Agricultural College of Cirencester, in England, has recently advised the application of manure to the soil, as a top dressing, in all cases where it is practicable. He proves very satisfactorily to our minds, that the manure loses but little ammonia by this mode of treatment—less than by the ordinary plan of piling up and heaping it and much less than the value of the labor employed to handle it as much as it is often recommended it should be.

The reasonings by which Prof. Voelcker supports his position are scientific, and we shall publish them in full when we can get sight of the Journal of Transactions of the Royal Agricultural Society, in which his Essay is contained. Meanwhile we have only to say that there is nothing new in the practice advised, and everything to commend it in the experience of those who have tried it. It is only the plan of what is called surface manuring, and is at least as old as the earliest "Book of Husbandrie," Tusser.

Several years ago one of the most observant farmers we ever knew, as well as one of the most judicious, pointed out to us the error of plowing up cowpens as soon as the pen was moved. He had observed that the land was better for a number of years where the surface was left undisturbed. We have often noticed the fact since in that gentleman's practice, in our own, and other cases. In his case especially, we remember that his cow pens, trod perfectly bare, always covered themselves with the richest sod of Kentucky blue grass—which, by the way, *is* the June grass, Poa Angustifolia, and *not* the Poa Compressa, Mr. Cassius M. Clay to the contrary notwithstanding—in two or three years without any seeding. Here was a successful application of Prof. Voelcker's theory, which we will show to any gentleman who will go with us to Albermarle in Winter or Summer. As the last was perfectly bare, and manured only with dung and urine, there was no mulch in this case.

Having heard from the graziers of Loudoun and Fauquier, and other sections, that their lands were enriched by feeding straw in the fields to their cattle, we determined to try it, and selecting the poorest and naturally the thinnest piece of land at Shadwell, a pretty bare hill-side with some healed up gullies in it, we fed cattle there one winter with straw and corn stalks. The land improved faster than any other piece of land we ever manured, its condition being considered.

The farmers of the South Branch of Potomac, who send the brag beef of Virginia to market, feed them in two pens with the corn upon the stalk unshucked. They feed them in one pen to-day, and the other to-morrow; their hogs alternating in the same way, *after* their cattle, to consume the undigested corn in their dung. Their lands are probably equal to any in the State.

The farmers of south-western Virginia do the same thing.

The largest wheat and tobacco grower in Halifax county, we learn, does not even manure his tobacco lots in the usual way, but he puts the straw and stalks on the land and runs the cattle over them. And his nett profits for the amount of surface tilled are the largest we know.

Several years ago Mr. Edmund Ruffin, in an elaborate essay in the Southern Planter, recommended the application of all manure as a top dressing to clover. He attributed much of the fertility of his land to that circumstance, and he had been practising it for a number of years, and does so still.

So do the best farmers on lower James River, such as Mr. R. M. Taylor, Mr. Ro. Douthat, Mr. Selden, and Mr. Carter. And their lands, though hard grazed, are improving every year.

We have by no means exhausted the panel of practical farmers known to us, whom we could name; but we proceed to give authority from the books. The best practical writer we know on Agriculture, is Von Thaer. In his "Principles of Agriculture," p. 211, Skinner's edition, he says: "There are visible advantages attending the spreading upon the land of fresh strawy manure, and to leave it till the plowings of Spring commence. * * * *

"This method of covering the soil during winter, renders it much more friable and remarkably fertile. I have often seen the washed, but not rotten, straw thus left on the ground, removed to form fresh litter;—and nevertheless, the soil from which this straw has been collected, appeared as perfectly manured as if all the straw had been decomposed. * * *

I have so often seen the good effect of long or short dung thus spread over beans and peas, and left there during their growth, upon hot, light land, that I have no doubt of its advantages on these two crops, particularly if they have been late sowed. But what is still more remarkable and difficult to explain, is that the following crops on land treated in this manner are almost superior to those on which a larger amount of decomposed manure has been plowed in."

He then goes on to give instances of his observation and experience, and adds: "The strong smell occasioned by spreading manure leads to the opinion that the evaporation from it must be very considerable; but when we consider that a few grains of musk will for years continue to perfume the atmosphere surrounding it, without sensibly diminishing its weight, it is permitted us to doubt whether the juices evaporated from the manure are very considerable; and if I may believe my own experience it does not diminish its weight." * * *
(On this point Prof. Voelcker proves Von Thaer's conjecture to be perfectly right.)

"It appears, therefore, that there is no solid ground for objection to leaving the manure uncovered on the ground for some time."

Again he says, p. 224; "The soil is usually plowed before the sheep are folded on it; and as soon as the folding has taken place they hasten to bury the manure thus deposited on the ground, by a superficial plowing. Although this proceeding is universally adopted, I have had my doubts as to the eligibility of it, since I have learned of several experiments being made by agricultural friends of mine, who assert that they have seen the most beneficial effects resulting from folding—cow-penning—when the manure was suffered to remain on the surface of the soil for a considerable period."

Here then is a brief statement of the practice of the best farmers and of the best farmed districts of Virginia, and of the best farmer-author who probably ever lived in continental Europe, adopted in some cases before Prof. Voelcker was born, and in others by people who never heard of him until recently. His explanation of the fact is a masterly one; and we thank him for a scientific proof of the correctness of a long established practice, and for affording the best example we know of the concurrence of science and practice in agriculture.

We wish we had more chemists like Prof. Voelcker. Too many people have ignorantly upbraided chemistry with following in the wake of practice instead of directing it; and too many chemists have accepted the issue. But if science is built on induction, how can it be otherwise than behind the facts? Its business is to deal with facts. If it anticipates them it is no longer science, but vain speculation. We have had a touch of that in Liebig's mineral theory, which we believe is now upheld only by that slowly progressing primary, Prof. Mapes.

## Ruta Bagas and Other Root Crops.

The time is approaching for sowing roots, and perhaps the following may be an inducement for those that have not as yet grown any, and who therefore are ignorant of their value. I shall show them what can be done by bad treatment, and in an unfavorable season.

Last June I had a piece of ground that we could not get into a fit state for corn. I therefore determined to have a crop of roots, and the only preparation it got (without manure) was plowing, harrowing and rolling. I drew the drills thirty inches apart with the corner of a draw hoe; a man will run his hoe along as fast as he can walk, and straight enough after one straight line is made. I then sprinkled a little super-phosphate of lime along the mark so made, this being sufficient to give the seed a quick start, and set a couple of quick walking men to sow it in the following manner: Take some seed between the fore-finger and thumb, about as much as you take on the end of your finger when looking at clover seed, and drop three seeds a foot apart, carefully keeping the thumb and finger in motion, and walk quick; half a dozen seeds will perhaps drop in one place, and then perhaps but two, but this is evener and better than I can get a drill to do it. This is a quick way, for the men will try who can get out first, and you can conclude the quicker they move the evener your seed is going in. When all is sown, I set them at one end of the field, and get them to "herring bone" it, which is done by placing the two heels together, and moving the right heel into the hollow of the left, and *vice versa*—the closer the heels are kept together, the better the seed is covered. The hands should be placed behind the back crossed, which enables the worker to move along quicker and with more ease to himself, it being as a balance to the body. This is a light covering, but all that is necessary for turnips; I then run the roller over them and they are finished.

When they have made their rough leaf, I run Knox's horse hoe through them, to keep the weeds down and keep the plants growing. When the plants are about four inches high, I set the hoes on to thin them, they being about the distance you want them from this method of sowing; they cut each side which takes your extra plants out, leaving but one plant standing. When they are done thinning, set on your horse hoe again to loosen your soil, this is all the hand hoeing you want if you keep the weeds down, as the use of the horse hoe afterwards will throw a sufficiency of loose mould between the plants, which will smother the weeds until such time as the size of the leaf or leaves occupies the space between them, when there is an end to weed growing. I raised on this piece (one acre) of ground on which we could not at that time (since drained) grow any other crop, nine hundred and thirty bushels of ruta baga turnips, which has been a great saving the past winter to the corn crib. I fatted one pair of oxen, and kept upwards of twenty head of horned cattle on them and mangel wurtzel, clover hay, straw, and cornstalks; I am now feeding ruta bagas.

My object in stating the above, is to show farmers that root crops are not so extra hard to raise, and that they can raise them to advantage without using up their best land, and costing too much for the working of them. Root crops are objected to, as being too expensive to raise. I have always found that such objectors are men who never raised any root crops, and know nothing about them. A man who has tried them once will repeat the practice.

As for their tainting the butter, it is all moonshine, and another excuse for not growing them. If a man wishes to have his butter taste turnipy, he can very easily effect, and as easily prevent it.

When the above amount can be taken off with such bad treatment, they can see what can be done by good treatment, which consists in plowing your land two or three times, harrowing and rolling as often as necessary to get a good tilth, with a proper quantity of stable manure applied broadcast, or drilled in when scarce. In drilling manure in, I open drill same as for planting potatoes, laying the manure in the bottom, turning the drills over as before; then run the harrow with the teeth up crosswise, or an old gate, which levels the earth and still leaves it sufficiently high that the rows where the manure is can be seen to sow on; then roll, keeping your ground level, as turnips and mangel wurtzel will not do here on raised drills, as in Europe. Our sun is too strong, and when on drills, as fast as the roots come to the side they are burnt up, and the crop spoiled. In Europe they cultivate all on drills, but theirs being a moist climate, their object is to draw the roots out and keep them dry, while our object is to supply as much moisture as we possibly can, and we can only get it by growing them on a level surface. Bone dust is the best special manure that can be applied to the turnip crop; I have used it at the rate of fifty bushels to the acre, and found it to pay; you can have your ground too rich for turnips, which must be guarded against, as if that is the case they will run all to tops and no bulbs—I have seen several instances of this. If you think your ground is too rich, do not sow turnips; instead of them mangel wurtzels; for this crop the richer the ground is the better, as it costs as much to work a half crop on the same piece of ground as it does a whole one.

G. Howatt.

Newton, N. J.

(*Country Gentleman.*

---

☞ Why is a lady's stocking like an English Knight? Because it is gartered.

## Who is the most successful Farmer?

Is it he who raises the best crop of wheat? No, sir! Is it he who can exhibit the best pork and beef? Oh, no, sir! Well, then, perhaps it is he who lays up the most money? No, sir, the matter lies higher than that.—Suppose two farmers have each one hundred acres of land equally productive, but one has a market so convenient as to give him the same income, with half the labor. Which is the most desirable farm? Again, suppose that each has a market equally convenient: but the one is ready-pay and the other is long credit and doubtful pay? The difference is surely not to be overlooked. Again, the sales are equally good; but one market tempts and leads to dissipation and quarrels, while the other conduces to elevation and happy acquaintances. Which is the more successful of the two? Each of these questions can be easily answered. And yet the question about the most successful farmer, aims higher than any of these suggestions.—Success always has reference to the highest good. A farmer is successful in proportion as he reaches that highest good. Take an example for illustration: A field of wheat, subject to the farmer, has a beautiful history, to set forth the numerous steps of human responsibility. That field begins to be successfully cultivated, when it exhibits the fact that all the seed has taken root and promises an abundant crop; but the farmer does not yet boast of success. The next step is now successful; the field has escaped the weevil and the blight, and is ready for the harvest. The third step is to be taken. To whom shall he look for those propitious days and nights that alone can bless the crop with perfect soundness for market? Here, again, we suppose success. Another step of success, is, a fair price to pay for his labor and risk. It is by the sale of this crop, the farmer is to clothe himself and family, as well as educate and furnish the numerous little conveniences of social life. Suppose success in this market-price also, the highest good is not yet reached. The farmer has a soul whose wants tower higher than all these.—This crop began, continued and perfected, was the result of a helping Friend; shall he forget that friend, whose ever watchful care distilled the dews and gave the timely showers and daily brought the faithful sun to his help? Has he then reached the stopping-place of success, till he has performed the office of the High Priest of Nature's offerings, and putting on the robes of a thankful soul,t addressed himself to the delightful work o special gratitude and love to God, as well as honesty and beneficence to his poor neighbor? This all done, it may be called a successful crop; it has borne its highest fruit at the throne of God. Whatever stops short of that, is a failure in the final evidences of success.

"What shall it profit a man if he gain the whole world and lose his soul?" Who would call him a successful farmer, that comes home a beastly drunkard from the market that has filled his pocket with the gold for an abundant crop? Success, therefore, lies in the skill by which the farmer adapts each step of his profession to its proper end. The sharp scythe to the dewy grass, instead of the dull blade to wiry grass. The smiling face in a sweet dairy, instead of the crabbed temper in a stinking buttery. Not only a place for every-thing and every-thing in its place, but the most suitable place for every-thing. It is not enough to have things and places, but there must be the proper adaptation of places and things. The key must fit the lock, not merely in reference to doors and granaries, but in a still higher sense. The farmer that has given his heart to God, has the evidence of that happy adaptation. Seek first the kingdom of God and his righteousness, and all other things shall be added.

He puts no more manure upon his grounds than others, and yet in that manure heap, called the "Farmer's Bank," there is instilled for the friend of God, an element of success. Such a farmer plows his field like any other good workman; yet He who has said, the plowing of the wicked is sin, has made the laws of happy adaptation, by which, when the godly field is plowed, the furrows smell of prayer and faith in God. That odor indicates success. Why? Because God has a private interest in that farm. "Them that honor me I will honor." Prove me hereby, said God, if I will not open to you the windows of heaven and pour you out a blessing. Prove me, saith the Lord.

The natural laws of God are settled, that industry and intelligence shall be rewarded. There is "A Book" on natural history, also, which will teach any man disposed to study it, that no less settled are the laws that ingratitude, dishonor and neglect of God, somehow bring mildew and blight, and a thousand sly curses upon the fields and vines; and that love and gratitude and prayer have a strange kind of electricity about them, to produce a "land flowing with milk and honey." Let a man read the Word of God daily, and he shall find that a successful farmer has something to do, not less important than to manure his grounds from the barn-yard, to buy cultivators and stock.—Books and papers on Agriculture are excellent; but something else is excellent. God is an Agriculturist, and in his promises and threatenings, are things to be thought of daily. There is agriculture in the Prophets and the Psalms that has been too much neglected. There is grafting and pruning to be learned in the parables of Christ and the letters of Paul, which might be of considerable use to those who cultivate the knowledge of these things.

"Man shall not live by bread alone, but by every word that proceedeth out of the mouth of God." The caterpillar and the palmer-worm and the weevil, are sometimes called to be "God's great army;" and, therefore, while we study to find a good remedy for the weevil, it is also good philosophy to war against the Devil who goeth about to sow tares: let us not suppose that it is all Weevil and no Devil.

The best remedy for these evils, and Weevils and Devils, that injure the crops, is often not more into the heads of wheat than into the hearts of ingratitude that withhold the affections due to Him who has an eye to agriculture, whose sun and moon and clouds and winds obey him. "Will a man rob God?" Yes, if he cheat him out of that great debt--the heart that loves. The conclusion is therefore just, that the successful farmer is the man who farms it on the joint-stock partnership plan. God and himself form a company, and no cheating has place. God is in all this farmer's plans and thoughts, and always consulted for advice in every movement. Whether he plows, he plows unto the Lord; whether he plants, he plants unto the Lord; and whether he lives, he lives unto the Lord; and whether he dies, he dies unto the Lord. Is he not the successful farmer?—*Cincinnatus.*

*From the Southern Farmer.*

Messrs. Editors:—I take pleasure in communicating to you a very satisfactory and convincing experiment that I have made with Kettlewell's Manipulated and Peruvian Guano, applied on a piece of fresh land.—In the spring of 1857, I bought of Messrs. John Rowlett & Co., half a ton of Manipulated Guano, and half a ton of Peruvian. Dividing the field exactly in half, I applied the different guanos on each side of the division, about 150 lbs. to the acre. Set out the plants on both pieces tho same day, and worked it all alike. Both pieces ripened about the same time, and were cut about the same time; kept it on different scaffolds in the field, and hung it on different sides of my barn, fired and handled it all alike. At the time the tobacco was cut, I thought that made from Pervian Guano was the best; but after curing it, I found that the other was heavier and much richer in color, the former being leafy and wanting in substance.

I sent both lots to Petersburg, loose, and sold them the same day at West Hill Warehouse. The tobacco made from the Manipulated Guano brought $9¼ per hundred lbs., while that made from the Peruvian brought only $7, and the former weighed much heavier. In addition to the benefit I derived by the application of the Manipulated on my tobacco, I found that the wheat crop which was sowed on the same land without any application at all after the tobacco, showed a marked difference in favor of the Manipulated. So perceptible was it, that several gentlemen standing in my porch, some distance from the field of wheat, could point the line where the division was made.

I had used Manipulated Gunano before with great satisfaction, but had never made so thorough an experiment with it. I am now convinced that it is far cheaper, and much more valuable as a manure than Peruvian, and I take pleasure in making this communication that others may be apprised of its value. I am using it again this season on tobacco with equal satisfaction, and expect to use it on wheat in the fall.

Yours, very truly,
F. R. WILLS.
Prince George, Va.. Aug. 3, 1858.

[In confirmation of the above, the Inspector at the Warehouse gave the following certificate:]

PETERSBURG, Va., July 14, '58.
*West Hill Warehouse.*

Messrs. JOHN ROWLETT & Co.

*Gents*:—In reply to your inquiry I with pleasure state, that sometime in the early part of this year, the Inspectors at this Warehouse sold for Mr. F. R. Willis, a successful farmer of Prince George, and a gentleman of high character and undoubted integrity, two lots of loose tobacco, one of which as stated by him was made on land where Manipulated Guano had been used, and the other where Peruvian Guano had been used; the former bringing $9¼ per cwt.; the latter only $7. As indicated by the prices there was a very marked difference in the two lots, so far as to the former being heavier and rich; of the latter, thin, bony, coarse and poor.

In addition, I will state that so far as I am informed, the tobacco grown on land where Kettlewell's Manipulated Guano has been used is generally of a superior quality, and consequently several of our large tobacco growers are now using this guano on their tobacco crop in preference to other manures.

Very respectfully, yours,
B. B. VAUGHAN,
First Inspector, West Hill Warehouse.

*From the S. C. Farmer & Planter.*

## Manuring Land—Another Proposition.

*Mr. Editor*:—I am glad to see that the Planters generally are beginning to find out what they ought long ago to have known was to their advantage, and it is that they can and ought to make more manure than they do, and you may ask me why they have begun to do it. Well, I will answer your question in this way: I think they say, or it is said, that persons are always justifiable in acting in self-defence, and Planters begin to find out that the manuring system pays very finely, and they see every year that their lands are getting the worse of wear, or is wearing out from being planted and not manured. Not only this, but they find that one acre well manured, will make as much as three acres not manured, notwithstanding a good many planters say that manuring is a great deal of trouble. Admit it, I will ask any person to say if he ever got anything without trouble to obtain it. I have never yet met with a planter that is in the habit of manuring, who does not say it pays finely. And another reason why the planters are getting in the way of manuring is this: They have got through clearing the most of their land, and now they must either make manure or move West, for they must make so much cotton to the hand, and they are obliged to manure to do it. When I speak of planters getting more in the way of manuring than they used to, I am alluding to the planters in my immediate and some adjoining neighborhoods, and the plan that a good many adopt with their cotton seed and compost and stable manure, is, to apply it all to their cotton, and under the list, which is the best way that I and every other planter have tried, and and the reason why we apply it under the list for cotton, is, because we get two crops from the same manure. In manuring with cotton seed we put one peck to the task row, which will make fine cotton on poor land; and compost or stable manure we put from three to four bushels to the task row, and I am now satisfied that it is the only way to manure to be benefitted by it. Then follow cotton land, or land that has been planted in cotton and manured, with corn, and by doing that you can make fine corn, and thus get both a crop of corn and cotton off the land, leaving it a great deal better than it was before you began to manure it. This is a system that is pursued among us, and it is the only way to be benefitted by manure, for it is doing nothing, or it is throwing away manure and time to apply compost manure to the hill, to any crop.

W. Ba.

◆

The Borer.—Mr. Travis, of Natick, Mass., states that a mixture of one part salt, two parts fresh slacked lime, and two parts of soft soap, applied to the lower limbs and the body of the apple tree, after first scraping the tree gently, will prevent the borer from depositing its eggs in the bark. It should be applied about the middle of April. He states that the success of this remedy is complete.

◆

Wanted, by a Dutch gardener, a journeyman cooper to head a cabbage.

*From the New England Farmer.*

## Hog-Yard Compost.

In the immediate vicinity of your hog-pen, have a yard, strongly and permanently enclosed, and of sufficient size to afford ample accommodation to the number of swine you intend to keep. Into this cast as much good muck, chip-manure, sods, forest scrapings, loam from the road-side, sawdust, refuse hay, straw, haulm, and weeds that have not gone to seed, as will, when firmly compressed, form a stratum of one foot in depth over the whole yard. On to this let whatever liquids can be spared about the premises be directed, such as suds from the wash room, the wash from the sinks, a portion of rain water from the eaves, and whatever else that can be obtained that possesses any virtue. These fluids all contain more or less fertilizing matters, and if mixed with the other materials, will induce a thorough fermentation of the whole mass, and secure its preparation for the use and sustenance of crops.

A few quarts of corn, peas, buckwheat, or other grain, scattered over and dug into the manure, or dropped into holes made with an iron bar, will operate as an inducement to the swine to root and turn the mass, and thus effect the thorough incorporation of all the parts, so that, by their assistance, and the effects of a proper degree of fermentation, you will have, in the end, instead of the crude collection originally deposited, a perfectly homogeneous article of great richness, and at a moderate expense.

We mention the labor of the swine in this connection because it is a popular belief that they can be thus profitably employed; it certainly admits of a question, however, whether that belief is not fallacious. That is, whether the labors of swine in rooting up, turning over and mingling the common manure heaps of the barn, cannot be more cheaply performed by men, at common wages. In order to raise pork profitably, we must avail ourselves of two things, viz: get a *great weight*, and at an *early age*.—Can this be accomplished by *working hogs*, for well-fed ones will not work much.

Is it not, then, better to feed swine, from the beginning, with as much nutritious food as they will eat up clean, and with a good appetite, when they will remain quiet and lay on fat and flesh with great rapidity?

If the manure made from the process described above is intended for light arenacious soils, in which there is a want of cohesibility, it would be well to add a liberal percentage of fine clay to the other ingredients, where-ever that article can be easily obtained. This is the constitutional alterant which such lands require, and, with the organized and decomposable constituents of the mass, will produce most immediate and favorable effects.

By applying this earth in the compost, it will be found, that, although the quantity annually used, may be small, it will, in time, produce an important change, and secure a good degree of retentiveness and productive energy to lands ordinarily too light for the profitable cultivation of any crops but rye or corn.

There can be no doubt, we think, that the running of well-fed hogs on manure heaps is of great value to them; such hogs will not root much, while their constant droppings, especially the liquid portions, are of the most valuable character. Where they run over horse-manure heaps, they keep it compact, preventing the admission of air, and that rapid heating which quite often nearly destroys it. At any rate, in one or the other of these ways, or by partially using both, a large and valuable heap of manure may be annually secured from the hog-yard. Now is the time to begin the process.

*From the Dispatch.*

## West Green.

Mr. Editor: We had, a few days ago, the pleasure of visiting this place, and enjoying the good things of this world to a degree that does not fall to our lot every day. Now, as some of our friends may be curious to know where and what West Green is, and what was the nature of our good things, we will here give a word of explanation.

West Green Pomological Gardens and Nurseries are situated four miles west of Greensboro', in an elevated, pleasant and healthy region, almost in view of the N. C. Railroad. Mr. Westbrook, the original proprietor, commenced these gardens as an amateur, in 1843; since that time, almost all the important fruits, European, Northern and Southern, have been brought into cultivation, and, to a greater or less extent, have been fully tested, thereby enabling the proprietors to come to a reliable conclusion in reference to the merits and demerits (merits we should think, to judge from the specimens we tasted,) of each kind of fruit.

In 1852 the original proprietor, Mr. S. W. Westbrook, bought out the nursery of Charles Mock, Esq., of Davidson county, whose reputation as a nurseryman was unsurpassed, and removed his stock of trees to West Green.

The nurseries now embrace about fifty acres, and have growing at present at least five hundred thousand trees of various sizes, and of almost every variety; about three hundred thousand of which will be marketable this coming fall.

Two hundred varieties of apples are at present under test; 150 varieties already tested. 75 varieties of peach under test; 125 tested. 50 varieties pear under test; 100 tested. 100 varieties cherry under test; 30 tested. 25 varieties plum under test; 30 tested. 15 varieties apricots tested; a few under test. About the same number of nectarines have been tested.—Much attention appears to be given to the smaller fruits. The strawberry has been made a speciality, there being in the Gardens 30 varieties, 17 of which have been tested.

Almost every kind of grape, both European and American, is here in a fine state of cultivation, and we learned from Mr. Westbrook that the currant succeeds admirably in the South.

Our friends will pardon us for this particularizing, but we promised to tell them what West Green is, and we did not know of any better method of giving them a correct idea of the place. Besides fruit trees, shrubbery, evergreens, green house plants, roses, &c.; in a word, everything we could imagine are cultivated in great beauty and perfection.

The proprietors have now nearly completed a Rustic, the first thing of the kind, we presume, ever erected in the South. Those of our friends who have seen these structures North, will at once know what is meant by a Rustic; and to those who have never seen such a thing, we will not attempt a description; suffice it to say, that it is the queerest sort of an establishment, framed of trees, with the bark on, placed upright, weatherboarded with bark, and ceiled with bark, and ornamented with the roughest of knots and knobs.

The one at West Green is situated in the midst of a fine grove of oaks, in close proximity to the Ice house, and completely environed with orchards of the finest fruits. It will be a delightful place for pic nics and *plenty*.—Judging from such structures North, the cost of this one cannot be much less than $1,500 or $2,000.

Having now told you something of what West Green is, and has, we would like to tell you something of the good things we enjoyed while there, but find our—imagination we were about to say—lost in a wilderness of pears, plums, peaches, et ceteras; but there is no imagination about it—it is all a *reality*. Added to all this, Mr. Westbrook is one of the most kind, liberal and gentlemanly men that we have met. He not only shows you all his improvements, nurseries, &c., and gives you of his choicest fruits, but entertains you in a handsome style. We couldn't enumerate in a month the *names* of fine fruits we enjoyed; we can only say to our Eastern friends, come up and do likewise; and then if you don't say that Portsmouth, with all its sea breezes, salt water bathing, sailing and fishing, Yeopon tea and *excellent* water, and Monk's Hall to boot, can't beat West Green, you may say that we have no *taste* in these matters.

H.

Greensboro', July, 1858.

*From the London Pamphlet.*

## Rarey's Great Secret.

First. That he (the horse) is so constituted by nature that he will not offer resistance to any demand made of him which he fully comprehends, if made in a way consistent with the laws of his nature.

Second. That he has no consciousness of his strength, beyond his experience, and can be handled according to our will without force.

Third. That we can, in compliance with the laws of his nature by which he examines all things new to him, take any object, however frightful, around, over, or on him, that does not inflict pain, without causing him to fear.

The horse, though possessed of some faculties superior to man's, being deficient in reasoning powers, has no knowledge of right or wrong, of free will and independent government, and knows not of any imposition practiced upon him, however unreasonable these impositions may be. Consequently, he cannot come to a decision as to what he should or should not do, because he has not the reasoning faculties of man to argue the justice of the things demanded of him. If he had taken into consideration his superior strength, he would be useless to man as a servant.

Every one that has ever paid any attention to the horse has noticed his natural inclination to smell everything which to him looks new and frightful. This is his strange mode of examining everything. And, when he is frightened at anything, though he looks at it sharply, he seems to have no confidence in this optical examination alone, but must touch it with his nose before he is entirely satisfied ; and as soon as this is done, all is right.

We might very naturally suppose, from the fact of the horse's applying his nose to everything new to him, that he always does so for the purpose of smelling these objects. But I believe that it is as much or more for the purpose of feeling, and that he makes use of his nose or muzzle (as it is sometimes called) as we would of our hands; because it is the only organ by which he can touch or feel anything with much susceptibility.

We know, from experience, that if a horse sees and smells a robe a short distance from him, he is very much frightened (unless he is used to it) until he touches or feels it with his nose ; which is a positive proof that feeling is the controlling sense in this cuse.

It is a prevailing opinion among horsemen generally, that the sense of smell is the governing sense of the horse ; and Faucher, as well as others, has with that view, got up receipts of strong smelling oils, &c., to tame the horse, sometimes using the chesnut of his legs, which they dry, grind into powder, and blow into his nostrils, sometimes using the oil of rhodium origanum, &c., that are noted for their strong smell ; and sometimes they scent the hand with the sweat from under the arm, or blow their breath into his nostrils, &c., &c., all of which, as far as the scent goes, have no effect whatever in gentling the horse, or conveying any idea to his mind ; though the acts that accompany these efforts—handling him, touching him about the nose and head, and patting him, as they direct you should, after administering the articles, may have a very great effect, which they mistake to be the effect of the ingredients used.

Now, reader, can you, or any one else, give one single reason how scent can convey any idea to the horse's mind of what we want him to do ?—If not, then of course strong scents of any kind are of no avail in taming the unbroken horse.

In order to obtain perfect obedience from any horse, we must first have him fear us, for our motto is, *fear, love and obey ;* and we must have the fulfilment of the two first before we can expect the latter : for it is by our philosophy of creating fear, love, and confidence that we govern to our will every kind of horse whatever. I should not want, for myself, more than half or three-quarters of an hour to handle any colt and have him running about in the stable after me; though I would advise a new beginner to take more time, and not be in too much of a hurry. When you have entered the stable stand still, and let your horse look at you for a minute or two, and as soon as he is settled in one place, approach him slowly, with your arms stationary, your right hand hanging by your side, holding the whip as directed, and the left bent at the elbow, with the hand projecting. As you approach him, go not too near his head or croup, so as not to make him move either backward, step a little to the right or left, very cautiously; this will keep him in one place. As you get very near him, draw a little to his shoulder and stop a few seconds. If you are very near him, he will turn his head and smell your hand, not that he has any preference for your hand, but because that is projecting, and is the nearest portion of your body to the horse. This all colts will do, and they will smell your naked hand just as quickly as they will of anything that you can put in it, and with just as good an effect, however much some men may have preached the doctrine of taming horses by giving the animals the scent of articles from the hand. I have already made it appear that that notion is a mistake.

As soon as he touches his nose to your hand, caress him as before directed, always using a very soft light hand, merely touching the horse, always rubbing the way the hair lies, so that your hand will pass along smoothly as possible. As you stand by his side, you may find it more convenient to rub his neck or the side of his head, which will answer the same purpose as rubbing his forehead. Favor every inclination of the horse to touch or smell you with his nose. Always follow each touch or communication of this kind with the most tender and affectionate caresses, accompanied with a kind look and pleasant word of some sort, such as "Ho! my little boy, ho! my little boy!" "Pretty boy!" "Nice lady!" or something of the kind, constantly repeating the same words, with the same kind, steady tone of voice; for the horse soon learns to read the expression of the face and the voice, and will know as well when fear, love, or anger prevails as you know your own feelings; two of which (fear and anger) a good horseman should never feel.

If your horse, instead of being wild, seems to be of a stubborn or mulish disposition; if he lays back his ears as you approach him, or turns his heels to kick you, he has not that regard or fear of man that he should have to enable you to handle him quickly and easily; and it might be well to give him a few sharp cuts with the whip about the legs, pretty close to the body. It will crack keenly as it piles around his legs, and the crack of the whip will affect him as much as the stroke; besides, one sharp cut about his legs will affect him more than two or three over his back, the skin on the inner part of his legs or about the flank being thinner and more tender than on his back. But do not whip him much.

* * *

It is stated that scattering a few lettuce seed in different parts of the garden is a remedy for the cut worm. The worms get under the leaves of the lettuce and live on them, and do not touch any other plant. Scatter the lettuce seed freely, and when the plants get to be in the way, pull them up.

*From the New England Farmer.*

## Manures—Vegetable and Animal.

Everything which has growth upon the soil, even to the comparatively dry and unsucculent haulm or straw which most crops leave behind them, is capable of being transformed, by the chemistry of nature, into manure, or the pabulum of vegetable life.

By the term *humus*, we understand that portion of the vegetable structure, or organization, which is resolved, by fermentation, into mould; such as the foliage, the stems, and succulent parts of the stalks of plants, and even those portions of the more perfectly liquified or woody organism, which are broken up by the play of chemical affinities, and made capable, when rendered soluble by water, of contributing to the development and sustenance of plants. It is rarely the case, however, that *mere* vegetable matters are applied to the soil artistically.—They are, for the most part, used in conjunction with animalized particles, which render them more energetic, efficient, and salutary in their effects.

Even the manure from the stable is by no means a purely vegetable substance, although formed of hay and grain. In every case, portions of matter rejected from the animal system, are mixed up with the vegetable mass—worn out, abraded particles, which are no longer of any service, and which are thrown into the common receptacle which receives the residuum of the food that has not been digested, and from which it passes in the form of excrement.

The poorer an animal is, the less of this animalized matter does it throw off; hence the well known fact that the manure made by cows, oxen, horses, sheep and hogs, which have been well kept, is much more energetic and valuable than that furnished by those which have not been supplied liberally with food. The urine of every animal contains a certain portion of this animalized matter, and hence its superior value for agricultural purposes and the high degree of vegetable fecundity resulting from its application to most crops and soils. The ammonia contained in this liquid manure also contributes, very essentially to its fertilizing powers; but the animalized matter is that which chiefly produces its fermentation and putrefaction, without which it would be nearly or quite useless for manurial purposes, at least in its immediate effects.—Other principals highly beneficial to vegetation are also contained in urine, many of which are derived immediately from the food upon which the animal is kept. This remark applie also to the solid voidings, and is illustrated by the following table, showing the constituents of faeces and urine.

In one hundred parts of horse dung, in a fresh state,—the animal having been kept on oats, hay and straw,—there were

| | |
|---|---|
| 3.7 | of biliary matter and coloring matter in a state of alteration. |
| 6.3 | of mucus, (crude,) &c., &c. |
| 20.2 | of non-digested vegetable remains and ashes. |
| 69.8 | of water. |
| 100.0 | |

The quantity of ashes in this case was six per cent. Their constitution, according to accurate analysis, was as follows: In one hundred parts—

| | |
|---|---|
| Phosphate of lime, | .05 |
| Carbonate of lime, | 18.70 |
| Phosphate of magnesia, | 36.25 |
| Silicia acid, | 45.00 |

Urine from the horse contained, in one hundred parts—

| | |
|---|---|
| Carbonate of lime, | 1.1 |
| Carbonate of soda, | 0.9 |
| Hippurate of soda, | 2.4 |
| Hydrochlorate of potass, | 0.9 |
| Urea, | 0.7 |
| Water, | 94.0 |
| | 100.0 |

It will be seen that both these articles contain carbonate of lime, a substance valuable to vegetation in many ways, and they are also replete with other highly energetic and valuable principles. In applying manure to the soil—whether animal or vegetable—we should endeavor, in the first place, to ascertain the character and condition of the latter, and also the habits, character and requirements of the crops intended to be grown upon it. Whether we turn in green crops, or feed them to animals, and apply only their excrements, this information is alike essential to success. By applying to a vegetable, manure which does not contain principles congenial to its nature, or which does not enter into its constitution, we do not secure those advantages which we might derive if the manure were more appropriate to the plant which it is desired to produce. It is worthy of some study, therefore, to act understandingly upon this point, and to furnish such aliment as will be taken and assimilated by the system, for the support of which it is intended. By enabling ourselves to do this, we shall obviate no inconsiderable expense and trouble, and ensure a better success.

## New Plan for Drying Peaches.

As the furze which covers the peach is very objectionable in drying them with it on, and as peeling them for drying is a tedious process, and causes the loss of much of the sweetest and best parts of the fruit, a plan which will obviate both of these objections and give us the dried fruit as good as if peeled, and in fact even better, is a desideratum, the supplying of which would be very acceptable to all who are in the habit of drying this most excellent and desirable fruit for table use. A lady friend of the writer has found it out and communicated it to him, and he will here describe it: Make a tolerable strong lye with wood ashes, by boiling them in water—letting it stand after being boiled sufficiently, until the ashes settle to the bottom, when pour off the lye. Then put the peaches to be dried in this warm, but not hot enough to cook them any; and rub them a little while. Then take them out and wash them in clear, cold water. This process will take all the furze entirely off, and leave them as slick and smooth as nectarines, with nothing but a thin skin on them. Then cut off and dry as usual. Peaches dried in this way, will be found to be very sweet, and have all the advantages of not losing any by the usual process of peeling—as the sweetest part of fruit is generally that next the peeling. We have eaten pastry made with such peaches, and can speak from experience.

*Cor. Louisville Journal.*

☞ Julia C——, of Lynn, who writes from St. Joseph, Mo., says:—

I beg leave to correct the author of "Every Thing After Its Kind," in one particular, regarding vegetables. He has certainly never resided in the country, or he would have known that one stalk of corn often bears every variety of corn planted in the field.—I have also often seen perfect gourds and pumpkins growing on the same vine; and every one knows that watermelon and citron seed being planted together, the fruit will all be citrons.

*For the N. C. Planter.*

## Horizontal Ploughing, and Hill-side Ditching.

### Letter No. 2.

*To the Hon. Thomas Ruffin, President of the North Carolina Agricultural Society:*

Hillsboro' Oct. 21st, 1857.

Dear Sir: You were, I think, the first man who introduced Horizontal Ploughing into North Carolina, but without, perhaps, the protection at first, of the Hillside Ditches.

I was taught by you, and have now for more than twenty years practiced the precise mode which I am about to describe; and I here declare, that when the work has been properly done, I have never been disappointed in my expectations from it.

In the directions which I am about to give, I have mainly followed Captain Hardwick of Georgia, whose elaborate and admirable essays on this subject were published in the Cultivator in the summer of 1855.

### THE LEVEL.

The level or instrument is the first thing to be considered. The one which I use, is called the Rafter Level, and is of the simplest kind. It is of heart poplar, half inch thick and four inches wide, the pieces being about 8 feet long. They are let into each other at the top at such an angle that the other two ends or feet are twelve feet apart. These ends are sawed off square, so that they will stand even upon the ground. A cross bar of the same sort of plank is then secured from one side to the other across the middle, and the frame of the instrument is made.

You will now fasten a plumb line to the top of it exactly, and placing the feet of the instrument on an even piece of ground, you will drop the plumb and mark where the line crosses the cross bar, and the exact centre between these two points gives you the true level, which you will mark permanently with a knife or saw.

Or go to a carpenter's bench and get him to adjust a plank twelve feet long, on a perfect level with his spirit level, and place your instrument upon it, and drop the plumb as before, and where the line crosses the cross bar, gives the true level, which you will mark as such.

### THE GRADE.

Then in order to get the different grades which you will need in making Hillside Ditches, get four bits of wood, one inch thick, and placing your instrument on an exact level, put one piece under the foot next to you, and dropping the plumb, mark plainly with a knife or saw where the line crosses the cross bar, then perform the same operation with 2, 3, and 4 pieces at a time in succession, and you will have a scale of grades, from one to four inches in twelve feet; which you will find sufficient for all purposes. It would be better, however, to have a spirit level attached to the instrument, especially would it work better in windy weather.

### HILLSIDE DITCHES.

The Hillside Ditches are first to be made. Their object is to receive and carry out of the field, or to some branch, ravine, or proper receptacle within the field, the water which may happen to break over the beds, at the time of an extraordinary rain. Or to carry off all the surplus water when the field is in small grain and the beds have been broken down and the ground leveled.

In constructing these ditches, the operator will take his level, accompanied by a boy and his hoe, and proceed to the highest point of the field which is to be broken up, and just where it is perceived that the water begins to collect and a wash is likely to be made, he will locate a ditch.

This is done by putting down your level, and moving the foot from you either up or down, as may be required, until the plumb line shall fall upon the grade of two inches, or such other grade as you may intend to give, and then you move the level forward, putting the hinder foot exactly in the track of the foremost foot, and fix the grade in the same way, and so on until the whole line for the ditch is marked out across the field. The boy with his hoe making a chop in the ground at the forward end of the level, every time it is taken up. Care must be taken not to diminish the grade in this line of the ditch, because if the grade is materially lessened, the flow of water in the ditch will be checked, which may accumulate, break over and do much damage.

A ploughman then follows, and runs a furrow along the line of the ditch by the chops, while they are fresh and easy to be seen.

The operator then moves down the hill from 30 to 70 yards, more or less, according to the shape and undulations of the land, and marks out the line for another ditch in the same manner, and so on until all the ditches are located. The ditches are then plowed out the desired breadth and depth, and the dirt is drawn out with hoes to the lower side so as to form banks for the ditch.

### THE BEDS.

The ditches being finished, the next thing to be done is to lay off the field in parallel beds for cultivation.

And here again the operator proceeds with his level, boy and hoe, to the highest part of his field and just above the spot where a wash is likely to begin, he commences on the side of his field, or other convenient starting place and marks a line as before, with the exception that now a perfect level is to preserved, which is to be done by moving the forward end of the instrument up or down, as the case may require, until the plumb line strikes the level mark, and in proceeding be sure always to put the hinder foot of the level precisely in the track from which the foremost foot was just taken.

This line when finished is also to be marked out by a plough, following as before. Then descend the hill or slope from 20 to 50 yards, more or less, as the nature of the ground may require, and form another furrow in the same way. And so on until the field is laid off—These furrows cross the hillside ditches wherever they reach them.

These furrows are called *guide furrows*, because by them the beds are to be formed.

The field is now ready to be ploughed into beds. These beds are to be as wide apart as the owner may like, and in making them, a good turning plow must be used, which must run as deep as the soil will allow, going down to the clay. The work is best done by commencing on the lower side of one guide furrow and ploughing down half way to the guide furrow next below it. And then by moving the plow down to that guide furrow, and ploughing upwards from it until the ploughing in the other direction is reached.

The object of this is, to equalize the variation from a perfect level, which will exist in the space between the guide furrows, in most fields, occasioned by the irregularity of the land, or the unequal undulations of the land. And it will be found that the furrows thus run on each side of the guide furrows and starting parallel with them, will somewhat vary from a perfect level, and actually meet at one or more points, leaving pieces of the land between them not broken up.

These spaces are to be broken up by *short beds*, which will commence on the side which seems most level.

The field is now ready for planting and cultivation.

### GENERAL REMARKS.

1. In laying out the Hillside Ditches, it is important not to have them too long, but to empty them as soon as you conveniently can. And on that account it is much better usually, not to run them entirely across the field, but to begin about the middle of the slope to be laid off, and run them from that as a centre-line, up and down the field out to each side. And in doing that, it is best again to make the ditches lap at the starting place, leaving a space of twelve feet or more between their beginning points, which will enable you to haul your manure into the field, and your crops out of it without crossing the ditches.

2. I have always turned, in breaking up the land, at the ditches. A man who attends to his own business and has it done right may pass over most of them. And in beding up the field turn rows must be fixed at such points as are most convenient, being controlled by the nature of the ground.

3. No invariable rule can be given for the grade of the ditches, or their width or depth. The good sense, judgment and experience of the farmer must determine these points.—They must be large enough and have descent enough to receive and carry off all the water which will flow into them in case of the beds above them breaking. On my land, which is a red clay soil, free from sand, and therefore porous and absorbent, a grade of two inches to the 12 feet, and from 10 to 12 inches deep, and from 20 to 30 inches wide, answers the purpose for the ditches. The bank on the lower side of the ditch being carefully preserved unbroken.

If the ditches have too much descent, the danger is that they will wash into gullies; if too little, the water may accumulate in them and break over. These are the extremes to be avoided.

4. According to my experience, the time of greatest danger to your field in this mode of cultivation, is at the first working of the crop, for then the beds are necessarily broken down in a great measure. If just at this period a very great rain shall fall, you will probably be injured some. But even then, not so much as if your field was ploughed up and down hill, because all the furrows are still upon a level, and the water does not accumulate to a ruinous extent at any one point. And the damage will usually be avoided entirely, by carefully cleaning out the water furrows at this working. And the period is of short duration, for at the next working the dirt is thrown back again and the beds restored.

5. Now, Sir, I am aware that many persons object to this system of cultivation, out and out; and say in round terms that it will not answer. Of such persons, I am inclined

to think that few have ever really given it a *fair trial.* They have not practiced the mode *here laid down.* They have used an imperfect instrument in leveling their land, or have tried to do it by the eye without a level at all; or they have endeavored to make each water furrow carry off its own surplus water, or empty it into the ditches, by giving the beds, water furrows and ditches, all the same uniform descending grade.

All these expedients have failed, because in ninety-nine cases out of one hundred in a field of any extent, the surface of the ground is too unequal to allow any of these modes, especially the last, to be performed with accuracy and perfection. Let all such objectors first try Horizontal Ploughing and Hillside Ditching as here described, and afterwards give their judgment upon it.

## CONCLUSION.

No single year can perhaps be remembered when land in North Carolina has suffered from washing rains, more generally or more immensely, than during the present year.—The present year has furnished the severest test of the efficacy of this mode of cultivation that I have ever known. There was, especially just in this vicinity on the night of the third of May, an immense fall of rain, which produced greater ruin than I have witnessed from a single rain at any time within twenty years. And this was followed through the season by several other terribly washing rains. And yet my ploughing stood the whole without injury. Full fifty acres of my corn field was land so rolling, that there is not a spot in it from which the descent, in the direction of the greatest descent, is not ten feet in one hundred yards. It was broken up in the fall and winter, five and a half inches deep, in beds five and a half feet apart, with a first rate plow which turns a furrow of eleven inches.

This field, with beds on a dead level, and hillside ditches having a descent of two inches in twelve feet, went through this year of extreme trial without a wash. In some places the water trickled over the beds where the level had become imperfect, especially in *the short rows,* but was soon disposed of in the furrows below, which were more perfect, and thus all damage was prevented.

You will observe that I have described this system of cultivation as adapted to my own lands, and therefore cannot say that *precisely* the same result would be gained in lands of a different quality.

But I will venture to say, that deep ploughing, combined with this system, will prevent any lands from washing; unless it is attempted to make corn, cotton or tobacco for successive years upon the same field, and then the land losing its cohesiveness, will almost certainly wash under any treatment.

With great esteem,  
Your ob't. servant,  
J. W. NORWOOD

*From the Southern Homestead.*

## Hog Cholera—A New Remedy.

EDS. SOUTHERN HOMESTEAD: As this disease is making great ravages amongst the hogs in many parts of the country, it is very desirable that a preventive or remedy could be discovered

I have lately heard of a farmer in the Western District who lost several of his hogs with this disease. Nothing he could do, seemed to have any effect. At length, as the case seemed desperate, he had recourse to a desperate remedy. He boiled as much poke root as he could hold in his hand, and stirred in Indian meal and made a mush, which he gave to his hogs every day for awhile. The result was that he lost none after he commenced this treatment. Whether this proved a preventive or not, it is certainly worth a trial. I hope all will make known their experience on this subject. J. R. B.

Davidson co., Aug. 1858.

TO PREVENT FLIES FROM TEASING HORSES. Says the Prairie, Wis. Farmer: Take two or three small handfuls of walnut leaves, upon which pour two or three quarts of soft cold water; let it infuse one night, and pour the whole next morning, into a kettle, and let it boil for a quarter of an hour. When cold, it will be fit for use. No more is required than to moisten a sponge, and before the horse goes out of the stable, let those parts which are the most irritable be smeared over with the liquor, viz: between and upon the ears, the neck, the flank, etc. Not only the lady or gentleman who rides out for pleasure will derive a benefit from the leaves thus prepared, but the coachman, the wagoner, and all others who use horses during the hot months.

MILKING YOUNG COWS.—It is said that young cows, the first year they give milk, may be made, with careful milking and good keeping, to give milk almost any length of time deemed desirable; but that if they are allowed to dry up early in the fall, they will, if they have a calf at the same season, dry up at the same time each succeeding year, and nothing but extra feed will prevent it, and that but for a short time.

# EDITORIAL.

**RALEIGH, SEPTEMBER, 1858.**

☞ The Postage on the N. C. Planter is ½ cent on each No. if paid quarterly in advance; or 1 cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year, to any place in the United States.

## The Value of Manure.

We give several articles in this number of the Planter, upon the various kinds of fertilizers, viz: Manipulated Guanos, Composts, Barn Yard, and other Manures, because, for the remainder of the year, the accumulation of Manures will in a great measure be the employment of the Farmers. And in this connection, we desire to impress upon our readers the necessity of keeping stock, and of being careful to save all the excrements, coupled with all the herbage that is not eaten, to restore to the soil what has been taken from it. This is the principal resource of the farmer.

The manure from neat stock is more abundant than from other animals in this part of the country, and this manure is less likely to be injured by heating than that which is dropped by horses and sheep. But the manure from neat stock is much injured by freezing before it has been mixed with other matter. After it has frozen and again thawed two or three times, it is found to have no scent or effluvia, and may be handled as freely as a lump of clay.

When the cattle are suffered to go a distance for water in the winter, they may drop manure in their path through the field or pasture. The ground may be covered with snow, and no trace will appear in summer of the winter path of the cattle, save the lumps of excrement that were left on the way. Now you might suppose that here the grasses, &c. would grow rank, and exhibit evidence of the manure dropped in winter. But you will be disappointed; the manure here was so frozen while in an unfermented state that it is nearly lost to the owners of the soil.

Let our readers go and see in May and June next, whether the grass is any better where so much manure was dropped than in any other part of the field.

It is highly important, then, to prevent the freezing of the unfermented manure.—And the first step towards it is to keep the cattle shut up in the barn or yard through the winter season. What they drop in the cow yard is trod on and mixed with other matter, which serves to retain at least a part of the essence of the article. Oxen and cows tied up in the barn expose their excrements still less, and may be so contrived as to prevent all injurious freezing through the winter. This is a very important point, and all farmers should turn their attention to it. The prevention from frost will alone pay the cost of a cellar in a few years, to say nothing of the advantage of securing the liquid, which is too often entirely wasted.

Horse stable manure is never injured by heat. When it is thrown out of the stable into a heap, it soon begins to burn in pretty cold weather. In moderate weather it heats so much as to turn white, and loose three-fourths of its weight. Horse manure has therefore been less highly prized than it should be. But when rightly managed there is no manure that operates better, or remains longer upon the soil. Some kinds of manure work sooner, but they are sooner spent. Hog manure, for instance, is active very early in the season, and it makes very good corn; but we see very little of its virtue the succeeding year. Horse manure that has been well kept, and that has absorbed all the horse urine, is the most lasting kind of manure that we obtain from animals.

## The State Fair.

Remember—begins on the 19th of next month—October. We trust every one who can possibly do so, will contribute something to the great exhibition which we expect to see on that occasion. It is by rivulets that rivers and seas are made. One grain of sand piled upon another, constitute the mighty mountains which stand in towering sublimity before an admiring world. So, too, are these stupendous exhibitions of the skill, industry and handiwork of a people gotten up, by *all* contributing something towards the grand enterprise. Let not any hold back, because they fear others will excel them—but let all do their best, and many a premium will be gained by those whose modesty awarded the palm of excellence to their neighbor.

We hope to see hundreds and thousands of our fellow citizens, from all parts of the State, at the next Fair. Ample accommodations will be found in the city and vicinity, and we doubt not every effort will be made to render as comfortable as possible all who may come.

## Sampson County.

We learn that the Sampson County Agricultural Society have resolved to hold a Festival at their Fair Grounds in Clinton, on the first Saturday in September. As the regular time of holding the Fair is too late to exhibit many choice Flowers, Fruits and Vegetables, it is deemed advisable to hold this Festival earlier in the year. A Correspondent says, at this gathering the members and their families only attend, together with such guests as may receive special invitation.—No premiums are awarded, and every thing exhibited is laid on the picnic table to be consumed by the company present. The members dispose of the business of the society, while their wives and daughters contribute and spread out the good things to be eaten. We think a festival of this kind held each May and September would give new life to the society. It would not only be an occasion of much social enjoyment, but would afford an opportunity of exhibiting early vegetables and Summer and Autumn fruits, that can never be exhibited at the regular fairs. Would not all the county societies do well to adopt this course? They would thus more thoroughly become acquainted with each other and with each other's productions. The knowledge of fine vegetables and fine fruits would certainly become more extensive. It is expected that every member will be present and contribute at least a basket of fruit or a bunch of flowers.

We commend the idea to all the County Societies, and also the State Agricultural Society. During the months of August and September, many articles of the Floral, Pomological and Vegetable kingdoms might be presented, which cannot be preserved till the usual time of holding the Fairs in October, November, and December, and thus not only greater competition be secured, but something like a fair exhibition of our county and State products in these things be effected.—In our view, such meetings in June and September would be found the most interesting of any that could be held. We hope to see the idea carried out by other Societies.

## Rotation of Crops.

This is an important subject, and one that cannot be too urgently pressed up on the consideration of farmers. A writer, who seems to be well acquainted with the subject, says: The word rotation, when applied to agriculture, signifies a succession of different crops instead of a succession of the same crop. It is known that the preparation of elementary substances that enters into the composition of plants, is not the same in all. Probably it is not precisely the same in any two plants. The soil containing the substances for the growth of plants, imparts them as needed, till nothing remains, when the plants will cease to grow. Supposing a particular ingredient for a particular plant, were lime, it is evident that when the lime is all exhausted, or drained from the soil, that plant can no longer be produced on it. So also of plants, and all other substances which compose them.

The rotation of crops grew out of experience. The farmers observed that in most cases, when the same plants were grown for two or three years, consecutively, upon the same soil, it did not yield the same abundant harvest, but when another crop was tried upon that soil, the product was satisfactory. Therefore, observation and experience gradually introduced an alternation of crops.—There may not be an entire failure the second, third, or even the fourth years; but each succeeding year, all other things being equal, there will be a diminished crop. But other things may not always be equal.—Drought, or cold may destroy or greatly injure a crop of Indian corn one year, and the next year, there being no drought, and an abundance of heat, the crop of corn may be far better than the preceding year. The soil, too, may be so amply furnished with a particular substance for vegetable growth that several crops of the same plant may be raised in succession on it, before material dimunition will be perceived; but this makes no exception to the principles for a general rotation. Sooner or later this substance will be exhausted, and there would then be a complete failure.

A single crop of wheat may so deprive the soil of one of its mineral constituents, that another crop of wheat would not grow upon it, and yet the soil may still contain abundant mineral constituents for the production of a good crop of clover or turnips. There is no fixed period for a complete rotation.—Four, five or six years, is the usual time, unless it be for lands that may advantageously remain a longer period in grass. Rotation may be prevented by keeping up an annual supply of the fertilizing agents of the soil equal to what is taken away by the plants.

Farms were formerly divided into meadow, plow or tillage land, and pasture, and each section was permanently used for these specific purposes, till the meadows were covered with moss, and the tillage ground was so impoverished as to yield inferior crops. The Flemings are the first known to have made rotation a fixed part of their system of agriculture. They insisted that where it was practiced, the land did not need rest, and it was this system which gave their husbandry a pre-eminence over that of every other country at that period. In Scotland it has been pursued with the very best results. It was also introduced into England, and has become general there, and it is now constantly gaining advocates in this country. I should be pleased to hear more on this subject.—J. E. Wight, *in N. E. Farmer.*

## Deep Cultivation.

Æsop narrates the following fable: A husbandman dying was desirous that his two sons should continue his business. He called them to his bedside and thus addressed them: "My farm and its treasures I bequeath jointly to you as your only patrimony. I charge you never to sell it, for somewhere in the ground, within a foot of the surface there are treasures buried." The sons concluded that he talked of money which was hidden there; so, after their father's death, with unwearied diligence they carefully dug every inch of the farm. The treasure they expected to find was not there, but the ground being well stirred and loosened, brought forth so bountifully that it proved a real treasure. Few farmers are aware that underneath their visible acres lie others equally valuable.—The man who does not improve property to its utmost capacity, is slothful in a moral sense, if not in a physical. That the products and profits of the best American farms can be doubled by deep cultivation, judicious rotation and high manuring, is unquestionable. If the best American farms can thus be increased in profit, how much greater the proportion on the thousands of poor acres. A little farm well tilled is both more pleasant and profitable than a great farm carelessly run over. Labor and industry well applied to agriculture seldom fail of a reward.

☞ Don't forget to be at the Fair.

## Manipulated Guano.

We give in this number of the Planter, a letter from F. R. Wills, of Prince George county, Va., giving his experience in the use of Manipulated Guano on a crop of Tobacco. It has, we believe, become the settled conviction, that the continued use of Peruvian Guano, year after year, on the same land, for the purpose of keeping up the crops of grain to the highest standard, is highly injurious to the soil. On the contrary, it is asserted that the phosphate Guanos prove highly beneficial. The Manipulated Guanos contain equal portions of Peruvian and phosphatic guanos—the former supplying the ammonia necessary for the development of the straw or leaf; and the latter the phosphate, no less necessary, for the perfection of the grain or plant.

The Southern Farmer, published at Petersburg, Va., in which this communication of Mr. Wills first appeared, in alluding to the matter, remarks:

Phosphatic guano is a mineral phosphate of lime, possessing the ingredients of bone dust; but the mineral, or rock, is so compact that it requires the most powerful machinery to reduce it to a state of impalpable powder, thus to render it available for the first crop. This reduction is effected by the machinery of the manipulators; and the Peruvian Guano, passing through the same process, undergoes a similar reduction, which greatly increases its value. Most farmers doubtless deem it sufficient to pass it through a sieve, and then to pound the lumps until they are well broken; but even then, there is a considerable loss, as no manual force can effectually pulverize them. We believe indeed that farmers, in view of the saving of labor in sifting and pounding, and of the increased product from the application, might afford to give at least 10 per cent. more for a perfectly fine article of Peruvian guano than the regular market price.

So much for the improvement due to mechanical agencies. But the combination is one of great value. Peruvian guano of itself, we are forced to the conclusion by general experience, after supplying the crop to which it is applied with nourishment, leaves nothing in the soil for the benefit of future crops. It is not one time in ten that a stand of clover can be had from it. The growing crop, having possession of the land, appropriates all to itself, and a sprig of young clover appears to stand no more chance than a delicate plant beneath the shade of a tree. It is under these circumstances that the phosphatic guano—a mineral bone dust—comes into action; and yielding its support to the plant more gradually—besides being almost a specific manure for clover, and entering largely in the formation of grain—the clover stands a good chance of establishing itself in the soil, while the crop of grain or tobacco is increased.

Our opinion, however, is that the manipulated guano should be applied to the land earlier in the season than the Peruvian, as a greater quantity of moisture is necessary to the solution of the salts. The price of Peruvian, after having been reduced some time ago, has now been raised again by the agents to its highest point: and this alone will make the application of the manipulated more economical. But unless the farmer has some experience in its use which is satisfactory to him, we could not recommend him to adventure largely upon it. Let him then try only such a proportion as will enable him to satisfy himself of its utility.

## A New Plow.

Joseph A. Cunningham, Esq., President of the Lancaster (South Carolina] Agricultural Society, has invented a Plow, which is said to be both useful and labor-saving.

A correspondent of the Lancaster Ledger says, it is a double plow, and can be used for planting and covering cotton or corn, and also for running around the same the first and second times, the mould being changed to suit. It can be drawn by one or two mules according to the nature of the soil. It is managed by one hand, but has two distinct feet with moulds on each and makes two furrows, and after the furrows are made, if you did not know how it was done, you would say at once it was done by the common old plow running first on one side and then on the other. In all agricultural improvements, we should look to the advantage gained, this is the practical way to judge, and either approve or condemn accordingly. What are the advantages? First one hand, and if the ground is loose, one mule by walking and plowing down or rather along one row of cotton or corn, does the work of two hands and two mules, because two as good furrows are made by the Cunningham Plow, as by two hands and two mules with single plows.

## Bear Marsh Agricultural Club.

"*Resolved,* That the Secretary of this Club be directed to inform the Publisher of the North Carolina Planter of the formation of the same, and furnish him with a copy of its proceedings; and also that he be directed to procure a copy of said publication for each of its members."

We give in another place the proceedings of the "Bear Marsh Agricultural Club," in Duplin county, at its primary meeting, of which the above is the closing resolution.

The advantages to be derived from the organization of such Associations, cannot be questioned. A frequent interchange of views and sentiments among men engaged in the varied pursuits of husbandry, cannot fail to be productive of good results, when it is remembered that there is scarcely any one who may not receive instruction from others, in the important and interesting science of Agriculture, or in his turn be able to impart something not known to others.

Farming, as an art, must ever be based upon the success of skilful experimenters; and it therefore becomes the duty of each one not only to enrich his own mind, but also contribute to the improvement of others.—Hence, the visiting the farms of others, to examine, learn, criticise and instruct; inspect farming implements, stock, arrangements of the farm, plans for dwellings, outhouses, situations of the same, &c., must be productive of decided benefit.

And again, if gentlemen may be benefitted by such a course, may not the Ladies—the matrons and house-keepers of our land, and at whose hands so much is naturally required, receive a like benefit by accompanying their husbands on those visits, advising with their neighboring ladies relative to their peculiar duties as housewives?

Such, we understand, are the principles upon which the Bear Marsh Agricultural Club has been formed. The members visit each others' farms, to be benefitted by mutual interchange of systems and views; those who have wives take them along with them; and such as have not, take their mothers and sisters, and thus all are benefitted, both as regards their pecuniary and social interests.

The Secretary says—"We have semi-monthly meetings; all seem to enjoy them and feel their beneficial effects. At each meeting we enjoy a good repast, discuss subjects connected with our interests as farmers, and separate, no doubt, wiser and better men."

We hope the example set by our Duplin friends, will be followed by every neighborhood in the State; and we know good to them individually will be the result, and to the State which we all love to see prosper in all the elements of greatness.

We thank them for the fostering aid extended to our Planter, and hope all our farmers will lend a helping hand towards sustaining a publication especially designed for their edification and profit.

*For the N. C. Planter.*

## Thorough Drainage.

Messrs. Editors: Living on a clayey soil farm for several years, and having experimented extensively on the 'evils' of this kind of soil, I ask a small space to give the result of my experience. In the outset of my investigations, I found in dry weather my soil was hard, instead of being open and porous; and in wet weather it retained moisture too long. I soon discovered my land lacked natural drainage—that the surplus moisture could not pass down through the under soil. This made the land cold and the vegetable growth slow. After fifteen years experimenting, I am convinced the remedy for these evils is Thorough Drainage!

I have tested the suggestions given in the "Cultivator" and other agricultural periodicals, as follows:

A thoroughly drained clayey soil is one of the best soils which can be chosen for most agricultural purposes. Thus drained, instead of being retentive of moisture, it is open and porous—instead of being cold and sterile, it is warm and fertile.

Then you may take any system of rotation founded on common sense in agriculture, and carry it out on your clayey soil. Manure may now be applied to some purpose—wheat and clover will not winter-kill—the leaven of drainage works through the whole lump, and enterprising and intelligent labor can be applied to some purpose.

But leaving "Thorough Draining" out of the question, "What *is* the best system of culture and cropping for improving a clayey soil?" Suppose a field is now in grass and yields but a partial crop, what shall be done with it? Here is one course to pursue:

1. Fall-plow late in the season, as neatly as possible, making narrow lands in the direction of the greatest descent, deepen and clear every dead furrow, so that no water may stand anywhere on the surface.

Sow in the spring to oats, first harrowing thoroughly—but without re-plowing. See to surface drainage as before.

2. In the fall, plow again in the same direction as in breaking up, unless there is nearly equal descent another way, making the dead furrows in the centre of the old lands, deepening and clearing these as in the first breaking.

Plant to corn in the spring, using the harrow and gang-plow to mellow the surface, and applying compost of muck, barn manure and ashes—leached or unleached. Top dress with plaster, after first hoeing.

3. Plow again in the fall, throwing two lands into one, surface-drain thoroughly, taking care to get a clear outlet for the water.

Sow to spring wheat or oats early in spring, and seed down to clover and herdsgrass, top dressing with a bushel of plaster per acre.

4 Let the land lie in grass as long as it produces well with the help of plaster and a triennial dressing of compost, early in autumn. *Put in underdrains* as soon as possible.

---

*For the N. C. Planter.*

Bear Marsh, Duplin Co.,
June 26, 1858.

A meeting of a portion of the citizens of the neighborhood of Bear Marsh, having assembled at Franklin Male and Female Military Institute, for the purpose of forming an Agricultural Society, the meeting organized by calling Benjamin Oliver, Esq., to the chair and the appointment of Dr. Benjamin F. Cobb, to act as Secretary.

Moved and seconded, that a committee of three be appointed to draft rules for the regulation of the Society, and receiving a unanimous vote, the chair placed upon that committee, Drs. James G. Dickson, Benj. F. Cobb, and Jesse Swinson, Esq., who reported the following, which were unanimously adopted.

*Resolved* 1st, That we do form ourselves into a body under the name of the Bear Marsh Agricultural Club.

*Resolved* 2d, That this body shall consist of not more than twelve members, who shall conform to our regulations.

*Resolved* 3d, That there shall be annually chosen from our number, a President, whose duty it shall be to appoint the meetings of the Club, and preside at the same when necessary to call to order and regulate its proceedings.

*Resolved* 4th, That there shall be chosen, also, annually, a Secretary from our number, whose duty it shall be to record the proceedings of the Club, when deemed necessary so to do, and to correspond with any other Club or Society, or with any person, whenever the interest of the Club may demand the same.

*Resolved* 5th, That should any necessary expenses accrue to this Club, the same being brought about by the unanimous vote of its members, the President shall be empowered to lay a tax upon each member, equally, sufficient to defray the same; and in all such cases the President shall collect such monies, and hand them over to the Secretary, whose duty it shall be to pay them out according to his orders and furnish a true record of the same, together with his receipts.

*Resolved* 6th, That there shall be no fund or treasurer for this Club, unless a unanimous vote of the same shall so declare at some future time.

*Resolved* 7th, That all members of this Club be required to sign these regulations, and comply therewith.

*Resolved* 8th, That all officers of this Club be chosen by ballot.

*Resolved* 9th, That any member who may be adjudged guilty of any disrespect to this Club, its officers or members, while transacting the business thereof, or who shall absent himself from two of its regular meetings successively without reasonable excuse, may be expelled therefrom by a unanimous vote of its members.

*Resolved* 10th, That any amendment of these rules shall require a two-third vote of all the members present at a regular meeting.

The following gentlemen signed as members of the Club.

Benjamin Oliver,
Jesse Swinson,
Benjamin F. Cobb,
David K. Kornegay,
Gideon M. Roberts,
Geo. W. B'Hurst,
Alex. S. Davis,
Joel Loftin,
Albert Hicks,
James G. Dickson.

*For the N. C. Planter.*

## The Grasses and their Functions.

BY PROF. E. EMMONS.

*Grasses differ as it regards their nutritive value.*—If a planter or farmer were to form his opinion of the value of the grasses for food from any one species now in use, that opinion would probably be erroneous. The value of a particular grass for the planter's use, may depend upon certain qualities independent of its real nutritive properties.—They differ among themselves, as to their nutritive value, but then, there are other important differences which confer a value upon them. Thus, some ripen at a particular part of the season, when green food is most needed. Some yield a second crop, or aftermath, more valuable than the first crop. Others grow in a soil very well located to meet the wants of the planter, as a wet soil, or it may be a dry soil. Some species prefer low grounds, others a mountainous region. Some form a good turf, and others require a barren soil, even drifting sands, which if allowed to grow, they will in due time fix.—Some of the best grasses will only grow well in company. Other differences might still be pointed out, but the foregoing are sufficient to show the great diversity which exists in this important family of plants. Nearly every species is distinguished from others by some peculiarity which renders it of some special value to the farmer, and fills a certain place which no other one fills so well.—In selecting those for cultivation, the planter will pay due regard to that special property which will be of the most use to him. And we may here remark, that there is an interesting field for inquiry, one which may be turned to profit, whether he is disposed to cultivate them largely or not. It is not without its difficulties, it is true, and there is much yet to be learned by observation and experiment.

But aside from the special properties which particular species may possess, and which confers upon them a local value, there are certain kinds which claim from the hands of the planter or farmer a general cultivation, on the ground that they combine in themselves those properties which make them always valuable. They rank higher than others, on account of their combination of properties. They take high rank as to their position in the nutritive scale, and all kinds of stock are fond of them; they ripen at a convenient season, and they yield a good crop. A planter, however, cannot disregard climate; and hence, his selection must be in a measure controlled by this condition; for example, timothy is an excellent hay and excellent in all its stages of growth—but it does not bear the sun or heat as well as several others, and in this climate especially, it can rarely be cultivated to advantage. It is extolled at the north as the very best of the grasses. It grows well there and yields large crops, and is really a source of wealth. But it is well known that in the middle and eastern parts of North Carolina it fails, or is not adapted to general cultivation. The planter must therefore seek a substitute and we believe that this substitute will be found in the Orchard Grass (Dactylis Glomerata) a figure of which is annexed. It is sometimes called cocksfoot grass, but the first name is in more general use, and is upon the whole, to be preferred.

This grass flowers in dense tufts or spikelets, or in crowded clusters, as represented in the cut, and frequently these spikelets are larger than our figure gives. This grass grows erect and attains a height of three feet. It is an annual. It is a native of Europe where it is highly esteemed, but it has been fully naturalized in this country. It is even naturalized as far South as Charleston, ac-

*Orchard Grass.*

cording to Elliott. It certainly flourishes at the North, and this fact itself proves it to be an important grass. Besides it is more widely distributed than we have yet intimated.—It is known in the north of Africa and also in parts of Asia, being as it were a cosmopolite. It is said to have been introduced into England from Virginia, where it now forms one of the most common grasses of English pasture.

This grass deserves cultivation here, 1st, because it resists drouth; 2d, because it may be fed close, and is hence an excellent grass for pasturage; 3d, because all stock eat it greedily; and 4th, it is a highly nutritive grass; and 5th, it does not exhaust the soil as much as timothy; and 6th, it is an excellent hay for winter; and 7th, it is well adapted for cultivation with clover, as it ripens with it. Whereas timothy does not ripen until clover has past its most nutritive stage,

The time for cutting the orchard grass for winter fodder is when it has blossomed, and before its seed have begun to ripen.—When its seed have ripened, the stalks and leaves have lost in part their nutritive parts or have become woody.

It is an excellent pasturage grass, and probably this fact is of the greatest importance to the planter of this State. It is a settled fact, that stock cannot be kept in the absence of pasturage. Soiling is an important adjunct and fills an important place in husbandry, but pasturage cannot be dispensed with. The late Judge Buel of Albany, whom the writer knew for many years, maintained the opinion we have expressed respecting the value of this grass for pasturage, not only as to its nutritive value, but also as to the quantity of food it furnishes in pasture. He also maintained that it was better to keep it fed close, and that it recovered itself from excessive feeding sooner than any other grass, when an opportunity was furnished by turning the stock into other grounds.

This grass, when it is proposed to cultivate it, should be mixed with other kinds, such as red top, fescue grass, red and white clover, and a small proportion of timothy. The seed is sown by cutting the tops or panicle with a cradle scythe. They are to be well dried, as the seed is liable to heat when much moisture is retained. The seed is quite light, and for this reason this grass exhausts the soil less than timothy. If sown with clover, one bushel of seed to ten quarts of clover suffices for an acre.

According to Prof. Way, the nutritive value of orchard grass is represented by the following constituents:

| | |
|---|---|
| Albuminous matter, ........... | 4.06 |
| Fatty matter, .................. | .94 |
| Starch, gum and sugar, ........ | 13.30 |
| Woody fibre, .................. | 10.11 |
| Ash, ........................ | 1.59 |
| Water, ...................... | 70.00 |

The ash is composed of:

| | |
|---|---|
| Phosphoric acid, | 8.60 |
| Sulphuric acid, | 3.52 |
| Carbonic acid, | 2.09 |
| Lime, | 5.82 |
| Magnesia, | 2.22 |
| Oxide of iron, | 0.59 |
| Potash, | 29.52 |
| Chloride of Potassium, | 17.86 |
| " Sodium, | 3.09 |
| Silex, | 26.65 |
| Percentage of ash by the dry plant, | 5.51 |

Orchard grass takes a preference over the Kentucky blue grass, because it may be grazed closer and recovers itself much sooner when allowed to rest; but it also yields more food and stands drouth better, and hence, is much superior to it for pasturage. It endures shade better than timothy. In a porous soil it sends its fibrous roots to a great depth. It is not adapted for lawns, as it is disposed to grow too much in clusters.

This grass flowers here in June. It is therefore early, and is fit for pasturage from ten to fifteen days earlier than most grasses.

The soil should be a rich loam, to produce it in its greatest perfection, but it may still be cultivated on the ordinary soils of the State. It should be sown rather thick to prevent its growth in clusters. The same results will follow by mixing it with red clover, which comes to maturity at the same time. The seed weigh only 12 lbs. to the bushel, and 23 lbs of seed would be required to an acre, if sown alone, but unless it is wanted for seed it should be mixed, as we have already remarked.

◆

MECKLENBURG AGRICULTURAL FAIR.—The next Fair will be held at Charlotte, on the 4th and 5th days of November. The list of premiums to be awarded on the occasion has been prepared by the Executive Committee. We learn it is contemplated to present the awards in silver plate, which would certainly be more gratifying to the successful competitor than money.

The success of the last Fair was encouraging and gratifying to all, and we hope such an interest will be taken in the approaching exhibition as will make it superior to former ones.—*Democrat.*

◆

☞ We have room for a thousand more subscribers on our books.

# Horticulture.

**S. W. WESTBROOK, EDITOR.**

## American Pomological Society.

It will be seen by the annexed Circul that this Society is to meet on the 14 day of September, inst. The Delegates represent the North Carolina State Agric tural Society, are S. W. Westbrook, Joshu Lindley, G. W. Johnson, and Moses Evans.

The Seventh Session of this National I stitution will commence at Mozart Hall, 66 Broadway, in the City of New York, on Tue day, the 14th day of September next, at 1 o'clock A. M., and will be continued for several successive days.

Among the objects of this meeting are th following: To bring together the most distinguished Pomologists of our land, and, b a free interchange of experience, to collec and diffuse such researches and discoverie as have been recently made in the science o Pomology—to hear Reports of the variou State Committees and other district associations—to revise and enlarge the Society' catalogue of Fruits—to assist in determining the synonyms by which the same fruit i known in America or Europe—to ascertain the relative value of varieties in different parts of our country—what are suitable for particular localities—what new sorts give promise of being worthy of dissemination—what are adapted to general cultivation; and, especially, to concert measures for the further advancement of the art and science of Pomology.

In order to increase as much as possible the utility of the occasion, and to facilitate business, members and delegates are requested to forward specimens of fruits grown in their respective districts, and esteemed worthy of notice; also, papers descriptive of their mode of cultivation—of diseases and insects injurious to vegetation—of remedies fo the same, and to communicate whatever may aid in promoting the objects of the meeting. Each contributor is requested to make out a complete list of his specimens, and present the same with his fruits, that a report of all the varieties entered may be submitted to the meeting as soon as practicable after its organization.

For the purpose of eliciting the mos re-

ble information, the several Fruit Com-
ttees of States, and other local associations,
requested to forward to Hon. Samuel
lker, General Chairman of the Fruit Com-
ttee, Roxbury, Mass., or to P. Barry, Esq.,
retary of the Society, Rochester, N. Y., a
inite answer to each of the following ques-
ns, at an early date, and prior to Septem-
r 1st:

What *six*, *twelve* and *twenty* varieties of
Apple are best adapted to a family or-
rd of one hundred trees, and how many
each sort should it contain? What varie-
s, and how many of each, are best for an
hard of one thousand trees, designed to
r fruit for the market?

What *six* and *twelve* varieties of the Pear
best for family use on the Pear stock?—
hat varieties on the Quince stock? What
ieties, and how many of each of these, are
t adapted to a Pear orchard of one hun-
d or of one thousand trees?

What are the *six* and *twelve* best varieties
the Peach for a family orchard? What
the best varieties, and how many of each,
best adapted to a Peach orchard of one
ndred or of one thousand trees?

Answers to these questions should be made
m reliable experience, and with reference
the proximity or remoteness of the market?

Societies will please transmit to the Secre-
y at an early day a list of the Delegates
y have appointed.

Gentlemen desirous of becoming members
remit the admission fee to Thomas P.
mes, Esq., Treasurer, Philadelphia, who
ll furnish them with the transactions of the
ciety. Life Membership, twenty dollars;
nnial, two dollars.

Packages of Fruits may be addressed to
M. S. Carpenter, Esq., 468 Pearl street,
w York.

MARSHALL P. WILDER,
President.
*Boston, Mass.*

P. Barry, Esq., *Sec'y.*
*Rochester, N. Y.*

## Save the Dead Leaves.

If every horticulturist would reflect for a
oment on the nature of fallen leaves which
ntain not only the vegetable matter but the
rthly salts; lime, potash, &c., needed for
next season's growth, and that too, ex-
tly in the proportion required by the very
e and plant from which they fall—nay,
re, if they would consider that it is precise-
in this way by the decomposition of these
ry fallen leaves, that nature enriches the
soil, year after year, in her great forests, it would scarcely be possible for such a reflecting horticulturist to allow those leaves to be swept away by every wind that blows, and finally lost altogether. A wise horticulturist will diligently collect, from time to time, the leaves that fall under each tree, and by digging them under the soil, provide in the cheapest manner the best possible food for the healthy growth of that tree. In certain vineyards in France the vines are kept in the highest condition by simply burying at the roots every leaf and branch that is pruned off such vines, or that fall from them at the end of the season.

*For the N. C. Planter.*

## Descriptive Catalogue of Peaches, that have been tested by experience previous to and during the year 1858.

By JOSHUA LINDLEY,
Pomologist & Nurseryman.
New Garden, Guilford Co., N. C.

1. Early Red Nutmeg.—This is the earliest peach that has ripened with me. It is a small fruit—about an inch and a quarter in length and one-eighth less in diameter.—It has a nice red cheek, with the opposite side marbled with red—and the fruit ripens from the 15th to the 25th June. The tree is of very dwarfish growth, with crimpled foliage; has uniform glands and large flowers, is very productive with good cultivation, and is only worth cultivation as the earliest peach that ripens.

2. Early White Nutmeg.—This peach commences to ripen a week after the first.—It is a little larger, nearly round, color much dotted with red on a white ground, and when fair to the sun showing quite red. It is a little more acid than the other, though a pleasant fruit, and is only valuable as ripening between the first and the finer varieties of the early peaches. It is a thrifty tree with uniform glands and small flowers, and is a great bearer;—ripe from the 20th to the end of June.

3. Large White Nutmeg, or White Nutmeg (common.)—This is twice the size of the early white, and is much superior to it in point of sweetness and fine flavor, and ripens at the end of June. It is of a dwarfish growth and a thin bearer until the tree is 7 years old—then bears well. It is hardly worth cultivation only by amateurs. It has serrated leaves and large flowers.

4. Early Anne.—This is a fine early peach, of a greenish white color, a little under medium size, and round form. It has serrated leaves and large flowers, and the

tree grows thrifty, bears abundantly, and ripens its fruit from the 1st to the 10th of July.

5. Early Tillotson.—A very good early peach, of fine flavor, of nearly medium size, nearly round in form, mostly of a fine red color. The tree is a thrifty grower and good bearer, with serrated leaves and small flowers, and ripens from the 5th to the 15th of July.

6. Early York.—This is the great peach of the season in which it ripens. The tree grows very thrifty and bears abundantly when very young—so much so that it ought to be thinned in full bearing seasons, to enable the fruit to ripen fine. It has serrated leaves and large flowers. The fruit, when well grown, is of nearly medium size, rather oval form, and of a rich juicy and fine vinous flavor—color red next the sun on a greenish white ground—and when fair to the sun almost entirely red. In the shade but little touched with red. Ripens from the 5th to the 20th of July.

7. Sweetwater of Prince.—This is of good medium size—color white with some touches of red on the sun side. It is a juicy and very good peach—but the tree is a bad grower and poor bearer—not bearing a fair crop until the tree is 7 years old. It ripens its fruit from the 8th to the 15th of July—and is only worthy of cultivation by curious and tasty amateurs.

8. Sweetwater of Downing.—This is a nice white fruit, of rather small size and fair quality. The tree is of dwarfish growth—has globose glands and large flowers, and is very productive—and as it does not ripen until the 15th of July it is of no value only to the curious amateur.

9. Baltimore Beauty.—This is a handsome and fine fruit of medium size, rather oval, tapering to a point at the top—color yellow with a red cheek next the sun, flesh yellow, sweet and good. The tree grows thrifty—has globose glands and large flowers, and ripens at the middle of July.

10. Coles Early.—This is a fine early fruit of nearly medium size. The tree grows thrifty—has globose glands and small flowers, bears well and ripens at the middle of July.

11. Early . ewington F.—This is one of the finest peaches that immediately succeeds the Early York. It is of nearly medium size--rather round—color red next the sun on a pale yellowish ground—and the opposite side marbled with red dots. Its flesh is rich, very juicy, vinous and sweet. It is a great bearer—grows moderately thrifty, has uniform glands and small flowers, and the fruit separates with difficulty from the stone even when fully ripe; it might be considered a cling—ripe middle of July.

1 . Walters Early.—This tree grows very thrifty—has globose glands and small flowers. The fruit is rather large, round, of a pale greenish white color with a bright red cheek—its flesh is rich, juicy, fine flavored and excellent. The tree is very productive and deserves to be more extensively cultivated that any other that immediately precedes the Early York—ripe middle of July.

13. Early Rose.—This tree grows thrifty, with globose glands and small flowers.—Fruit rather large, round, with a full red cheek. Its flesh is rich, juicy and excellent, with the flavor of roses—and deserves to be extensively cultivated as one of the very best; ripe middle of July.

14. Brown Nutgeg.—This I received for the Red Nutmeg, an early variety that ripens before the Early Anne. It is under medium size, of a brownish red color on a greenish white ground. The tree is of rather dwarfish growth with serrate leaves and large flowers. The fruit is very inferior, ripens about the middle of July, and is of no value.

15. Early Strawberry.—A fruit rather under medium size, round, color mostly red on a greenish white ground. The tree is a rapid grower with globose glands and large flowers, and is very productive. The fruit is of very good quality, and ripens the middle of July.

16. Palo Alto.—A rapid growing tree with serrate leaves and small flowers. Fruit of nearly medium size, round surface nearly covered with a beautiful red on a greenish white ground—flesh rich, juicy and fine flavored. The tree is very productive and ripens the middle of July.

17. Grosse Mignonne.—This is a thrifty growing tree with globose glands and large flowers, and a good bearer. The fruit is rather large, mostly of a red color on a greenish white ground, nearly round, rich, juicy and excellent, and ripens the middle of July.

18. Red Rare Ripe.—This tree grows thrifty with serrate leaves and small flowers. The fruit is medium sized, round, color red on the sun side, and mostly pale red marbled on the opposite side—flesh rich, juicy and fine flavored. The tree bears well and the fruit ripens the latter part of July.

(We hope friend Lindley will continue his descriptive catalogue.—Eds. Planter.

## The Strawberry Bed.

One great reason why so few succed with the Strawberry is, that as soon as the fruit is done, the work on its beds stop. If a bed has stopped fruiting, work it frequently. By keeping it clear of weeds and grass the plants will thicken up at the root, and have a greater capacity to bear next season. Where the plants are allowed to run and mat together, the heat of our summers will burn the whole bed up, but if they have room, and are kept well worked, they stand as great a degree of heat as corn. Young runners may be safely transplanted this month; but the plants will not bear transportation before the cool weather in the Fall. It is a mistaken notion that many have in obtaining strawberry plants, to want old plants. A young runner, with one root, is better than an old cluster of roots. Vigorous runners planted out now will bear fine fruit next Spring.

Botanic Garden,
*Washington, June* 14, 1858.

Sir:—I have been requested by Mr. Geo. W. Charlwood, representing the house of Messrs. Charlwood & Cummins, of London, to give you my opinion as to the qualities and genuineness of the seeds obtained by the Patent Office from said house as experimented upon by me in the Botanic Garden, in Washington.

I would state that I have made it a point every year, since I have been in the employment of the Government of the United States, to procure a sample of each variety of seed distributed by the Patent Office, not only of those obtained from Messrs. Charlwood & Cummins, of London, but also from Messrs. Vilmorin-Andrieux & Co., of Paris, with the object of testing their vitality and the per centage of loss, and I have invariably found them to germinate readily, and to be true to the names under which they were labelled. The percentage of loss in not vegetating was generally small.

I beg leave to add that most, if not all, the complaints made against the Patent Office seeds not growing, have been from a want of proper knowledge of their culture. In one instance, a person receiving Portulaca seed, covered it with earth to a depth of 2½ inches, when ⅛ of an inch would have been quite sufficient. In another case, a collection of flower seeds was scattered on a grass plot, in Washington City, and pronounced worthless, because they would not grow. In a third case, some Celery seed was sown broad cast and left to nature to bleach, without earthing up, and after being thus treated, it was pronounced far inferior to the worst in market. Another complained of the Brussels Sprouts, because they would not head up like other cabbage.

You are at liberty to make any public use of this communication that occasion may require.

Yours respectfully,
WM. R. SMITH.

Hon. Joseph Holt,
Commissioner of Patents.

Vegetable Garden.—There is always more or less vegetable refuse in gardens during summer, such as potato tops, pea haulm, and similar matter, which is either allowed to remain on the ground and dry up in the sun, or deposited in a heap for the purpose of forming manure. A better disposition of such products is to dig them at once into the soil; there are always some spare corners, or uncropped spots, which may be enriched by becoming a place of deposit for rubbish of this kind. Even the short grass from lawns may be covered at once, if no more useful disposition can be made of it; such as mulching between the rows of vegetables or over the roots of recently planted trees.—There is much loss of enriching matters by allowing these incidental accumulations to lie on the surface; and even as a matter of neatness and regularity, they should be at once disposed of, and rendered useful for future crops.

# For the Ladies.

## FLORICULTURE.

Green House Plants.—These may still be kept in the shade, but heavy rains should be kept off them. Be careful they do not suffer for water, as Camelia Japonica, and Daphnel Odorata, especially, will in blooming season, drop the flowers instead of opening them; also Agalias. Plants should not be allowed to stand on the earth, as the drainage thereby gets stopped up, and the plant must be unhealthy in consequence. Shift those plants into larger pots that require it. The greenhouse should be in readiness by the end of September, whitewashed and painted; where needed the plants tied to neat stakes, painted green, and the pots well washed.

Flower Garden.—All that can be done now, is to keep this scrupulously clean, keeping all the weeds out, and be careful nothing in the shape of plants are allowed to overhang the box edgings, where used, as close shade will surely kill it.

Dahlias may now have copious supplies of water in dry weather; those which show the centre of the flower green, should receive most.

Roses should have the earth well loosened round them, if out of bloom, and tied up neatly to stakes.

Geraniums that have been cut back, may be placed in a close cool frame, and sprinkled every night till they have well broken or rather grown two inches, when they may be shifted into other pots, still keeping them sprinkled each night.

Helitrope, Souvenior de Leige.—This Helitrope is undoubtedly the best one of the various light varieties now cultivated. Its habit is good, being a strong and free grower. The flowers, or rather truss, this season we have had to measure five inches across; it has a beautiful perfume, arising from the flowers, especially after a shower. Like other varieties, it requires a rich light earth, one-fourth sand, which should be sharp.—Having tried the plant by the side of some eight other varieties, last year and this, we now give it the preference.

"Gem" is a very pretty variety and free bloomer; the peculiar way in which the flowers open, make it a great favorite. It is of slender growth, and of a trailing habit.

Vothriarum Nanum.—A dark rich variety, of good habit and rich perfume. All the varieties, of course, are very tender, although the past winter we succeeded in preserving one by covering it up well; but young plants grow very rapid, and look better than old ones, preserved through winter, as it undoubtedly injures the constitution of the plant, which takes time for it to recover.

The three above varieties ought to be cultivated in all gardens where the delightful employment of growing flowers is used as a pastime. If cultivated in pots, use the compost described above; give good drainage, and water carefully, sprinkling over head each night, unless in bloom. Weak manure water, twice per week, will be of great service in strengthening them.

HAMILTON & CARTER,
Florists & Nurserymen.
Raleigh, N. C.

## SCIENTIFIC AMERICAN.

### PROSPECTUS.

*Volume Fourteen begins September* 11, 1858.

### MECHANICS, INVENTORS, MANUFACTURERS AND FARMERS.

The *Scientific American* has now reached its fourteenth year, and will enter upon a new volume on the 11th of September. It is the only weekly publication of the kind now issued in this country, and it has a very extensive circulation in all the States of the Union. It is not, as some might suppose from its title, a dry, abstruse work on technical science; on the contrary, it so deals with the great events going on in the scientific, mechanical and industrial worlds, as to please and instruct every one. If the mechanic or artizan wishes to know the best machine in use, or how to make any substance employed in his business—if the Housewife wishes to get a recipe for making a good color, &c.—if the Inventor wishes to know what is going on in the way of improvements—if the Manufacturer wishes to keep posted with the times, and to employ the best facilities in his business—if the Man of Leisure and Study wishes to keep himself familiar with the progress made in the chemical laboratory, or in the construction of telegraphs, steamships, rail roads, reapers, mowers, and a thousand other machines and appliances, both of peace and war—all these *desiderata* can be found in the *Scientific American*, and *not elsewhere*. They are here presented in a reliable and interesting form, adapted to the comprehension of minds unlearned in the higher branches of science and art.

---

TERMS:—One copy, One Year, $2; One Copy, Six Months, $1; Five Copies, Six Months, $4; Ten Copies, Six Months, $8; Ten Copies, Twelve Months, $15; Fifteen Copies, Twelve months, $22; Twenty Copies, Twelve Months, $28, in advance.

---

Specimen copies sent gratuitously for inspection. Southern or Western money, or Postage Stamps, taken for subscriptions.

☞ Letters should be directed to
MUNN & CO., 128, Fulton St., N. Y.

Messrs. Munn & Co. are extensively engaged in procuring patents for new inventions, and will advise inventors, without charge, in regard to the novelty of their improvements.

Sept. 1, 1858. 9

# 100.000

## CHOICE FRUIT TREES FOR SALE,

## BY WESTBROOK & CO.,

AT THE

## West Green Nurseries and Gardens,

NEAR GREENSBORO', N. C.

THE above stock embraces almost every desirable and select variety of Fruit, for the extensive Marketing Orchard, or the more limited Fruit-garden. Amateurs who wish to do the country a service by experimental operations, can be supplied with many of those new kinds of fruits recently introduced in Europe and America.

The most approved varieties of CURRANTS, GOOSEBERRIES, RASPBERRIES, STRAWBERRIES, GRAPEVINES, &c., always kept on hand.

Packing done in superior style and the packages carefully marked as per directions.

### 30 Bushels

of genuine CHINESE SUGAR CANE SEED, for sale raised by the Proprietors; consequently they have the advantage of one years acclimation over Northern and Foreign seed; a matter of vast importance to the purchaser, to insure success. The cane was raised entirely away from the influence of plants of similar genus. Specimens of the syrup will be sent to all post-paid applicants for them, to test its superiority.

| | | |
|---|---|---|
| 1 | Bushel, | $15 00 |
| ¾ | " | 12 00 |
| ½ | " | 9 00 |
| ¼ | " | 5 00 |
| By the quart, | | 50 |
| " " ounce, which may be mailed at a small expense, | | 20 |

All purchasers must pay their own freight and postage. Address

WESTBROOK & CO.,
Greensboro', N. C.

---

## FOR SALE,

I HAVE NINE NORTH DEVON YOUNG BULLS, and as many HEIFERS for sale. They can be selected by the purchaser now, and I will pasture them until the proper time of delivery, on the 1st day of November next, or I will deliver them at the State Fair. I will have but a few on exhibition at that time. Also a few South-Down and Grade South-down and Leicester young BUCKS.

Apply soon.

W. R. HOLT.

Lexington, N. C., August 1858. 8—3t.

---

## W. W. DINGEE, & CO.,

YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore at the prices named.

| | |
|---|---|
| An 8 horse power, including thresher and separator, | $165 00 |
| A 4 horse power, including thresher and separator, | 150 00 |
| A 2 horse railway power, including thresher and separater, | 145 00 |
| A 1 horse railway power with thresher, | 125 00 |
| A fan that will clean grain at once running through, | 25 00 |
| A grain drill with grass seed sower attached, | 75 00 |
| 2 or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, write to W. W. DINGEE, & Co.,
[6—6t.] York, Pa

---

I OFFER AT PRIVATE SALE A TRACT OF LAND consisting of 230 acres, near the town of Lexington and within one mile of the Depot, with a good dirt Turnpike Public Road leading to the Main Street, 25 or 30 acres of which is the richest Branch bottoms, with a deep and capacious ditch to carry off surplus waters, and most of it in grass for grazing and mowing; upwards of 50 acres are in the heaviest white-oak, red-oak and hickory timber. The rock are Trap and Greenstone, the soil a dark clay loam, and of excellent quality. It has on it numerous Springs of the best water, and is of the best quality for Wheat, Tobacco and Grass, and is capable of being made a superior Farm.

Also, a Tract of 200 acres, lying two miles East of Lexington Depot, through which also runs a public road. This consists entirely of wood land, pine, oak and hickory. It is within a half a mile of a Saw Mill on Abbott's creek, with an excellent road to the Saw Mill. The timber is of excellent quality and the soil a good sandy loam, will make a good Farm, and is considered of excellent quality for Tobacco. The prices asked for these lands, considering their convenient distance to a Railroad Depot, must offer great inducements to purchasers.

W. R. HOLT.

Lexington, N. C., August 1858. 8—4t.

# PROSPECTUS

## OF THE

# "North Carolina Planter."

The present is the ninth number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

WILL THEY DO IT?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ POSTMASTERS and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

September, 1858.

OCTOBER NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

Southern Agricultural Journal:

DEVOTED TO

THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

**A. M. GORMAN**, Publisher, Raleigh, N. C.
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

## A Card from Dr. James M. Jarrett, OF THE NEW YORK LUNG INFIRMARY.

My connection for the past eight years with the above Institution, as Chief Physician, and a twelve years' course of steady devotion to the Cure of Pulmonary Consumption and its kindred diseases, together with my unrivalled opportunities and advantage of pathological research—aided not a little by a perfect system of *Medical Inhalation*—has enabled me to arrive at a decisive, direct, and successful course of treatment for the positive and radical cure of all diseases of the *Throat, Lungs*, and *Air-Passages.* By inhalation, the vapor and curative properties of medicines are directly addressed to the diseased organs and the integument. I do not advise the use of Medical Inhalation of any kind, to the exclusion of *general treatment*; and although I consider it a useful adjuvant in the proper management of those fearful and often fatal diseases, yet I deem it very necessary that each patient should have the benefit of both *general* and local treatment. The success of my treatment in the above diseases, and the high character of the Institution over which I have so long had the honor to preside, are too well known to need any eulogy or comment from me. At the solicitation of many private and professional friends, through whose philanthropic aid the above charity has been long and liberally supported, and after due consideration, I have concluded to make such arrangements as will bring the benefits of my experience and treatment within the reach of all, and not confine myself, as heretofore, to those who entered the Infirmary, or who were able to visit me at my office. Hoping therefore that the arrangement will give entire satisfaction, both to my professional brethren and the public, I would respectfully announce in conclusion, that *I can now be consulted personally or by letter*, on all diseases as above, and that the medicines, the same as used in the Institution, prepared to suit each individual case, *Inhaling Vapors*, *Medical Inhalers*, &c., &c., will be forwarded by express to any part of the United States or the Canadas. Terms—My terms of treatment by letter are as follows, viz: $12 per month for each patient, which will include medicine sufficient for one month's use; also, Inhaling Vapor, and an Inhaling Apparatus. Payment as follows: $6 to be paid to Express Agent on receipt of the box of Medicine, and the balance $3 at the expiration of the month, if the patient be cured or is entirely satisfied with the treatment. Patients, by giving a full history of their case, and their symptoms in full, can be treated as well by letter as by personal examination. Patients availing themselves of Dr. Jarrett's treatment may rely upon immediate and permanent relief, as he seldom has to treat a case over thirty days. Letters for advice promptly answered. For further particulars address

JAMES M. JARRETT, M. D.
No. 820 Broadway, cor. Twelfth St. N. Y.

P. S.—Physicians and others visiting the city are respectfully invited to call at the Infirmary, where many interesting cases can be witnessed, and where our *improved apparatus* for the inhalation of medicated vapor can be seen and inspected.

October, 1858. 10—6m.

---

## 300,000 No. 1. Fruit Trees for Sale.

### WESTBROOK & MENDENHALL,

*Proprietors of the West Green Nurseries and Gardens near Greensboro', N. C.*

WOULD very respectfully call the attention of the citizens of the Southern States to their very large stock, of native and acclimated Fruit Trees for the Fall and Winter Trade.

This large and handsome assortment has been propagated from thrifty bearing trees and worked upon the best seedling stocks which is a sure guarantee of fruitfulness and longevity, two prominent characteristics which should not be overlooked by persons wishing to plant orchards either for marketing or family use. The stock consists of the following trees:

| | |
|---|---|
| 150,000 | Apple Trees. |
| 100,000 | Peach " |
| 16,000 | Pear " |
| 12,000 | Apricots " |
| 10,000 | Cherry " |
| 12,000 | Plum " |
| 5,000 | Nectarine " |
| 1,000 | Almond " |
| 4,000 | Grapevines. |

Besides, a very fine assortment of Currents, Strawberries, Raspberries, Gooseberries, etc., all of which will be sold on very reasonable terms. All packages put up in superior style and a complete invoice sent to each patron and so arranged that the invoice will be the register of the orchard after the trees are transplanted, if they are planted in succession as each kind appears on the list.

September 1, 1858. 2—

---

## FOR SALE,

I HAVE NINE NORTH DEVON YOUNG BULLS, and as many HEIFERS for sale. They can be selected by the purchaser now, and I will pasture them until the proper time of delivery, on the 1st day of November next, or I will deliver them at the State Fair. I will have but a few on exhibition at that time. Also a few South-Dower and Grade South-down and Leicester young BUCKS.

Apply soon. W. R. HOLT.

Lexington, N. C., August 1858. 8—3t.

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., OCTOBER, 1858. NO. 10.

## Hints on Wheat Culture.

The wheat crop is of so much consequence to the whole community, and especially to the large body of our readers, that we are not likely to make it too freqently the subject of remark.

It is a reproach to our agriculture that while the very frequent experience of some of our best farmers gives crops of thirty and forty bushels per acre, the usual product of our lands without a large direct outlay for fertilizers, are hardly more than a fourth of these quantities. The ready excuse is the difference in the quality of the land. As a general thing this is only an excuse. The very lands now so productive, have been, within the memory of many now living, as poor as the poorest; and of those now so poor, who will undertake to say that their natural constitution makes them incapable of the highest degree of improvement?—There are, no doubt, cases of this sort, but they are exceptional; generally there is nothing wanting but the proper use of the right means. When a land-holder finds that on all his possessions, he has not so much as a garden or a favorite lot which pays the cost of manure put upon it, and that weeds do not grow near his kitchen door or his pig pen, he may give up his land in despair.—Otherwise, let him not excuse his indolence and want of spirit, by charging the fault upon his land, without giving it at least a very fair trial. Nor is it flattering to our vanity, that even our best farmers, on the best lands, come so far short, generally, of what these grounds are capable of producing. Well attested cases of fifty bushels to the acre, we have had on a small scale, and frequent cases of forty to the acre, on considerable fields. They show sufficiently what can be done. But such crops are so very rare, that it is plain enough the most successful cultivators cannot command them. In England, on large estates, an average of forty to forty eight bushels is not unusual, according to Mr. Colman, and he mentions one well proved case of *ninety* bushels to the acre.—But there as well as here, how very far below the lowest of these numbers, are the average crops of many of the best farmers. The truth is, that the great body of cultivators do not work up to the knowledge at their command; and the most intelligent do not understand the subject of wheat growing, as so important a matter should be understood. We plead the numerous enemies with which the wheat crop is plagued, as the cause of so much uncertainty and failure, and with some reason. Sometimes, as during the present season, no known remedy has been of any avail against their ravages in certain localities. But taking the average of the ten years past, we think it will be admitted that the growing of wheat has not been unprofitable, and that the certainty as well as the quantity of the crop has been in almost exact proportion to the skill of the cultivator in the improvement of his lands, and the proper manuring and cultivation of his crop.

It is mere folly to undertake to cultivate wheat upon poor land insufficiently manured.

Land not capable of yielding fifteen bushels to the acre, should be manured, or let alone for some improving crop.

Wheat requires clean culture; it cannot be grown to advantage on any grass sod, except a well managed clover-fallow. A well turned clover sod, that has been mowed or judiciously grazed, is the best preparation for a crop. The pea-fallow is thought by many equal, by some superior, to the clover. Its value for the wheat crop will depend, in a measure, upon the care with which it is managed; so large a mass of vegetable matter put in with shallow plowing, may keep the surface soil so porous as to do the wheat a serious harm.* If not very thoroughly turned under with a deep furrow, it is better perhaps to do as is done by some experienced cultivators in Virginia, and so put in the wheat and the vines, as to leave a large portion of the latter uncovered on the surface. In either case the land should be heavily rolled. A firm seed bed seems essential to the well being of wheat. Deep plowing is not to be objected to, but it is important that the earth be well compacted with the roller, when the seed is sown.

Any grass sod, other than clover in its second year, should be planted in some cleansing crop, which will give the sod time to be thoroughly rotted. The best of our cultivated crops for this purpose is, without question, tobacco. The neat, careful cultivation, the thorough shading, and destruction of all grass and weeds, leave the ground in a state of perfect preparation for the wheat. The shallowest working of the surface which is sufficient to cover the seed, is all the labor required for putting in the crop; or a drill alone will do it, without any other preparation.

The most common cleansing crop is corn, but it is by far inferior to tobacco. If rich enough for wheat, the crab grass grows so luxuriantly after the working ceases, that it is hard to put the wheat in properly. If not rich enough to produce grass, it is not fit for wheat. A great deal of the wheat crop, however, is sown upon the corn field, and it is upon these fields that the purchased fertilizers are chiefly used. Wheat growers of very reliable judgment, have adopted the practice of putting in the seed upon the corn land with the drill, with no previous preparation by plowing. Others stir the surface with harrows, only enough to procure a covering for the grain. They avoid turning under the grass, and leave a firm bed for the crop to grow upon.

The practice of drilling in wheat with a machine, is one of the most important advances which has been made in wheat culture. The saving of seed, the increase of the crop, the security against winter-killing, and great economy in the application of fertilizers, are advantages so important and so well ascertained, that no one who sows twenty five acres, should fail to use the drill.

The introduction of the drill-culture will be followed, we do not doubt, by the practice of spring cultivation, with an implement to stir the intervals between the rows of wheat. The use of the roller is of great importance in the spring, to close the seams left open by the action of the frost, and settle the plants well in their bed. But the stirring of the intermediate spaces to the depth of a few inches, in such a manner as not to disturb the plants, would admit the influence of the rains and atmosphere, with undoubted advantage to the crop.

As to the time of seeding, the rule is, certainly, to sow early. There is great advantage in having the seeds sown deep enough in the ground, to get the plants well rooted by winter. It may be well borne in mind, however, that while the enemies of this crop generally, seem to have taken counsel together for its destruction, the fly especially has, for several seasons, been accumulating upon us, and may be of course expected again in force. It is desirable, for this reason, to postpone the seeding till after about the 5th of October. Earlier seeding is less essential, with advantages we now have, than it was some years ago; because, 1st, the drill is almost an insurance against winter-killing; and 2d, the use of guano is almost an insurance against rust. We could take chances against rust and frost, with a drill and only fifty pounds of guano, sowing by the middle of October, rather than to sow twenty days earlier without them. As to fly, the later seems to be, without question, the safer time. The impression that the later sown wheat is as subject to the attack of fly in the spring as that sown early, has not been sustained by our observation of the past crop. The field which had most fly in the fall, has been that which suffered most from its ravages in the spring. This, we say, is our observation; we should be glad to learn how far it coincides with that of others.

---

* The case mentioned in our last by our correspondent, Mr. Rouzee, may be accounted for in this way: the mere growing of the pea vine by shading and cleansing the ground, is an excellent preparation for wheat. Therefore there was a good crop where the vine was entirely removed. It was inferior where the vine was left, because perhaps the bed was left too open, and exposed to the action of the weather.

We would not, therefore, in this latitude, sow before the 5th of October, but would have everything in readiness, to get through at the earliest possible time after this. The fallow should be in readiness weeks before, that it may become well settled by seeding time. The corn should be cut off and set up, and every preparation should be made in advance, which may expedite the work of seeding, when once begun.

In conclusion, the wheat growers of Maryland and Virginia, have had this season an unusual opportunity of becoming acquainted with the character and habits of the several enemies which beset this crop. In some districts they have been very destructive, while in others they seem only to have given notice of their intention to come again. It is to be supposed, that there has been picked up by intelligent observers, many hints which might throw such light upon their ways, as would enable us, in a measure, to prevent or circumvent them. Why will not our friends furnish us with any information they may have gathered?

*American Farmer.*

## The History of Manures.

The history of manures cannot date so far back as the origin of agriculture, which was coeval with the foundation of society itself. In the earlier periods of the world, when the face of the ground was but thinly inhabited, and a virgin soil exhibited abundant fertility, the wants of man were readily supplied. With ample choice of ground at his command, he had only to remove to another spot, when land under cultivation for some time no longer yielded the same increase. The fact of diminished productiveness, by prolonged cultivation, was, no doubt, early observed; but the reason of this did not, probably, give rise to much speculation, so long as the remedy was at hand in the fresh soil around. But as population increased, and the habits of men became less nomadic, the necessity of restoring to the exhausted soil its fertility, would become a question of serious consideration.—The mode of doing this in the simplest way would suggest itself by the observation of what passed around them. The refuse materials ejected from their habitations, the odure of man and animals, the decaying carcasses of the latter, allowed to accumulate and rot on the surface of the ground, gave rise to a luxuriant vegetation on these spots far surpassing that of the adjacent soil. The repeated observation of such facts cannot fail to have arrested attention, and to have led, on reflection, to correct cause and effect. It was thus early seen, that organic structures in a state of eremacausis, the filth from crowded habitations, and other matters which are offensive to the organs, when allowed to decay on exposure, were intended by nature to be buried under ground, and thus to effect at once the removal of pollution from the air that was breathed, and to restore the lost fertility of the soil. Hence the earliest form of nature, and that which has remained unchanged through succeeding ages, and at the present day still forms the standard of comparison for other manures, was a mixture of the excrement and urine of animals with other decaying animal and vegetable matter. In the writings of the Greeks and Romans are found many notices of the attention they paid to agriculture and manures.

Collumella, who flourished during the early part of the first century of the christian era, wrote a great work, divided into twelve books, on agriculture. In the second of these he speaks of the breaking up and preparation of the ground, and gives an account of the different kinds of grain, pulse and artificial grasses, with the tillage appropriate for each. He gives directions for carefully collecting the excrement of cattle, for littering them with straw, which was to be removed when soiled to the dunghill; and also advises the collection of all kinds of ashes, and the burning of weeds, shrubs, trees and stubble, in fields; and the application of the incinerated matter as manure. The writings of this and other authors prove that the ancients not only paid attention to the management of farmyard manure, but that they were well acquainted with the mode of preparing artificial and all ordinary composts

Columella says he is not ignorant that there are some farms in the country in which neither the dung of catttle nor of birds is to be obtained. However, he is a slothful husbandman who has no manure. He may, states the same authority, collect any kind of leaves, the cutting of briars, and raking of highways; he may cut ferns, and mix these with the cleanings of his courtyard; he may dig a hollow place, such as was directed for the dunghill, and throw into it ashes, the dirt of the kennels, all kinds of straw, and everything that is swept from the house.—Indeed, the various processes now followed by agriculturalists to render the soil fertile were known by the Romans. They incorporated the light with heavy soils, and rendered them more porous; and although unacquainted with the theory of the operation, they may be said to have originated the principle of the modern process of subsoil ploughing; for in some districts it was the custom every fifth or seventh year to dig as deep as the rain penetrated, and turn up the bottom of the mould, by which the cornfields were said to be renewed, the particles of earth proper to the nourishment of the plants being supplied, to be carried downwards along with the rain. The practice of economising and employing farmyard manure and composts in general, may be said to have been transmitted from the Romans, with little change, to the beginning of the present century, varied only by the use and incorporation into composts of such articles as particular districts afforded. Thus chalk was employed in some places as a great adjunct to farmyard manure for turnips and all kinds of grain; in others, marl superceded lime; and along the seacoasts, calcareous sea-sand and sea-weeds were in high repute. In other districts, where manufactures were established, the refuse materials, such as soap waste, under the name of soap ash, woolen rags, &c., were in common use. Later still, animal matters, such as fish and bone, and other dressings, were in demand.

Although by the foregoing one sees what knowledge even the Romans possessed of manures, still they were far behind the Chinese in their system of agriculture. The basis of their mode is, as so often reiterated by Liebeg, *to return to the soil every ingredient that has been removed by a crop.* The result has been, that instead of the land becoming impoverished, it has augmented in fertility with a continually increasing population, since the time of Abraham or of the Egyptian pyramids. All those means, says Liebeg, which the German agriculturist considers perfectly indispensable for the increase of his produce, are not only quite unnecessary for the Chinese, *but without them* he produces crops more than double those of his Teutonic brother. No doubt other conditions exist in China different to Germany; some of them are Buddhists, and eat no meat, while here meat is partaken of for which fodder is required; but that is not the question—here principles are involved which must guide practice. The agricultural preceptors do not teach the planting of fodder with the view to obtain meat, but in order to have *dung;* and by this they prove that they do not understand a scientific law. In fixing a scientific principle, the first question is not whether it is advantageous, but whether it be true? In scientific agriculture *dung* no longer exists. All the ideas conveyed by this word are now exploded. Like the word *phlogiston,* which became obsolete at the end of the last century, as long as it was not known what phlogiston was, it served as an aggregate term to bind together a number of unknown causes to render them comprehensible. After it was ascertained what phlogiston represented, the right ideas were substituted, and the explanation of phenomena became true and reliable. Wood does not burn otherwise than formerly, air is what it was, water moistens as before; but what immense progress the human race has made since the right conception of air, oxygen and the process of combustion took the place of the word phlogiston? A similar, but greater and more blessed advancement, must follow from the right knowledge or perception of the nutritive process in plants and animals; and it is as absurd for a chemical teacher to explain phenomena by phlogiston, as it would be for a farmer to employ the word dung in explanation of any agricultural process; for, in the place of this word, which is now without meaning, the word manure as compost is now substituted, expressing that for each plant there are certain ingredients serving as food, from the great effect of which the phenomona must be explained.—*Dr. Muspral's Dictionary of Chemistry, part* 44, *just out in London.*

*From the Germantown Telegraph.*

## An Old Farmer's Experience;

### OR, HOW TO MAKE A POOR FARM RICH, WITHOUT MUCH MONEY EXPENDED.

### THE FORMATION OF THE DUNG YARD.

The barnyard should be protected by buildings or sheds on the north-west and north-east sides to break off the cold winds and storms; and fenced with a good post and rail fence, but not a wall, on the other two sides. The bottom should have a gentle descent from the barn, so that when the yard is empty, there will be no cavities for the water to stand in. There could hardly be a worse form devised for a barnyard than to make it hollow in the middle, like a dish, and tight enough to hold water; this hollow will gradually become filled with water, and the manure that is put into it will lie there soaking and souring, till it is carried dripping to the field. No fermentation takes place under water, nor would the manure be much benefitted by heaping it up, unless carted away to some dry place; even then the fertilizing properties of it would not be near so great as if it had never been soaked.

*Green Crops.*—It is of very great importance in the improvement of land, to plow in green crops of some kind My experience is that a clover sod, together with all the grass and weeds that will grow on it, from the first of July till the 20th of August, carefully turned under, is the best green dressing for a crop of wheat. Other kinds, as orchard grass, timothy, herdgrass, blue and green grasses, make valuable sod in the improvement of land, which, when plowed under, is equal to a moderate coat of manure. When the land is sowed broadcast with any kind of grain, it should at the same time be sown with grass seed, in order to produce a sod as often as possible, to plow in; as without a liberal use of grass seed, the progress of improvement will not be near as rapid.

*Farm Stock.*—Stock, to a moderate extent, is beneficial to a farm; but many landholders have entertained a very incorrect idea on this subject, in believing that keeping a large stock will improve the land much faster than a small one; so it would, if kept in the yard or stable the year round, furnished with plenty of good food, and dry litter to lie on; but as the farm does not produce a sufficient quantity, the balance must be bought, or the system must be abandoned, which I should recommend even before it is began. Horses, if they have enough to eat, will do well if kept in the stable the year round; cattle not so well. My plan is to keep cows enough through the summer to supply the family with milk and butter, and keep as large a portion of the grass ground for mowing as possible. After the first crop of hay and grain are taken off, there will be more ground to pasture, and will bear some increase of stock; but this increace should not be such as to eat the pasture down close, and leave the ground nearly bare when winter comes on. When the pasture becomes short in the fall, put the cattle in the yard; the cows that give milk should be put in warm stables of night, and have plenty of good food; the dry cattle will do well in the yard, having sheds to run under at nights and in stormy weather, with plenty of rough hay and corn-fodder, and good water in the yard for drink, whenever they want it.

### CROPS.

*Corn.*—I have never noticed any material benefit derived from fall, or early spring plowing of corn, but frequently a disadvantage, by the ground becoming too solid and compact, by heavy rains and the melting snows, requiring in some cases nearly as much labor to put it in a suitable condition for planting as would be necessary, if it had not been broken up till just before planting time; and the crop of corn none the better for it.

Fall or winter plowing, as I know from experience, is no kind of security against the depredations of grubs or other insects. The ground may be plowed from four to six inches deep, and in such a manner as to leave no part of it unturned, except where the lands are struck out. Plow in large lands so as to have but few open furrows through the field, roll and harrow it well, and mark it out in squares of four feet each way, so that there may be room to use the cultivator effectually—and drop four grains of good seed in a hill; if manured with ashes, drop half a gill with the corn and cover both together; ashes do the best on a heavy soil, being of little use in sandy land. If compost is used, put a shovel full on a hill; but in whatever way the corn may be covered, be sure to tread on every hill, to pack the earth about the seed; it will cause it to germinate, and come up better, than if it is not done. After the corn has come up, put a small handful of plaster on each hill; keep the ground loose and mellow and destroy all grass and weeds. The more the ground is stirred while the corn is young, the better it will grow. This farming process in the corn-field, should be entirely completed by the first of July. When the corn has arrived at a proper state of maturity, it should be cut up and shocked, or topped in the old way; each plan has advantages and disadvantages; the crop will not be much, if any, increased or decreased by pursuing either plan; but in any state of the case, the stalks should all be removed to the vicinity of the barnyard before winter, in order to be converted into manure. Many have been in the practice of late years, of manuring their corn ground, but whether it is best to be done in the fall or spring, seems to be a matter of dispute. This plan of farming I have but little faith in, unless there can be a sufficient quantity of manure made for the succeeding wheat crop; as to buying fertilizers to put on the wheat, and buy again to put on the grass, it will not do for farmers who are renters, or have to pay interest on a good portion of the purchase money. "It will cost more than it comes to."

As to applying manure, my experience has taught me, that in whatever state the manure is when hauled out, it should (except top dressing on grass land,) be plowed under immediately, while in a moist condition, as much of its fertilizing qualities are lost, by its becoming dry before it is covered.

*Oats.*—The next crop in rotation will be oats. The production of a crop of oats requires rather less strength of soil than any other crop; it will sometimes produce well on a grass sod plowed down; but the best plan is to put it in the ground that was in with corn the year before, and that as early in the spring as the ground will admit of.—The ground should be plowed in large lands to avoid leaving many clear-up furrows, and well harrowed before sowing; mark out in sowing lands or sow by poles. If the ground is poor, sow two and a half bushels to the acre; if middling, two is better than more; the better the land the less seed is required. If oats is sown thin, and the ground and season pretty good, it will succor out from the root, but will not thereby become too thick to thrive; and if it should lodge or blow down with the storms, as it will most certainly do, thick or thin, in a growing season, it will not settle into such a compact mass as to rot or prevent the filling and ripening of the grain. It was formerly held, and by many it is yet, that the better the ground the more seed should be put on, to prevent it from lodging; and the plan if carried out will do it to perfection; as may be seen by the production of what is spilled about the seed bag, it stands very thick, and seldom grows more than ten or twelve inches high, with here and there a grain on the top point of some of the stalks, and would not produce the seed spilled if it was all gathered. Very true, its being thick prevented it from lodging, and at the same time prevented any crop from growing. When the oats is sown as mentioned above, sow four quarts of clover seed to the acre, and harrow it once carefully to cover both together, then apply the roller to smooth it off, and it is done. A PRACTICAL FARMER.

Second Month 8th, 1858.

*From the Southern Va. Planter.*

## Charcoal for Firing Tobacco.

We are sorry we are a judge of the *good* quality of "the weed," after it has left the hands of the planter and passed through those of the manufacturer—after it has been assorted, sweetened, pressed, greased, &c., by the industry of the "colored population," who manipulate it at the factories. But, on this part of the subject, we can speak with a full mouth, as we rarely part company with our "quid" from breakfast until bedtime. Like many others, we have often tried to give up using tobacco, but the effort is vain. Possibly we might (in our ci-devant character of Doctor,) say something of the *evils* too, of indulging in the waste of money and health, and the loss of cleanlinesss and proper digestion necessary before one can become a competent judge of the merits of a "quid" or good "cigar." But prudence suggests that we should keep quiet here and stand non-committal, lest we bring upon us another lecture, in addition to many already received, for the practice of a "bad habit." The venerable Dr. Chapman used to say, that the use of tobacco was so injurious and vile a habit that no man should ever acquire it. If unfortunately acquired, it should at once be abandoned forever, "*except upon a pinch.*" Suiting the action to the word, he would deliberately fill his nostrils with *snuff*.

If then the habit of using tobacco cannot be cured, we will try to remove some of the difficulties in the way of curing it.

The smell, or taste of smoke, is very objectionable in any tobacco, to nearly all persons who use it, as well as to the buyer.

If wood (particularly oak) is used in "firing," it is almost impossible to divest the tobacco of both the smell and taste of smoke, which gives it, after being manufactured, a strong, bitter and disagreeable taste. Tobacco which is "sun-cured" is always free from this objection, and generally commands a higher price in consequence. But it is a much more troublesome operation to scaffold in the sun, keep it out of the rain, and to chink the open houses with straw, &c., in damp weather, than it is to dry up the sap at once by means of fire. There is trouble *enough* connected with it, everybody knows who has ever raised it, from the time when the plant-beds are prepared until the money is received for the crop; so that any saving of trouble, in the process of curing, is worth the farmer's attention.

We think the advantages of using charcoal for firing may be set down as follows:

1st, The tobacco is left untainted by the smell or taste of smoke, while it is, in consequence, better for manufacturing purposes. The appearance, too, is said by some to be improved, as it generally has a glossy, silky semblance imparted to it. All the black stain of the coal dust and smoke is removed while in the course of stripping and handling.

2d, It is much less troublesome, and *near a market for wood*, is much more economical.

3d, There is little danger of having the barn burnt down by sparks.

As to the cost of charcoal, we cured last fall a house full, 22 × 28 feet long, with 9 tiers, for $13. We do not know exactly how many *bushels* were consumed, but three cords of good oak wood would be worth that sum. The charcoal made a very hot fire, and there were no sparks from it. In conversation with a very successful planter not long since, he described his method of tobacco-curing as follows:

"I always try to get my tobacco to the house as soon after cutting as is practicable. As soon as the leaves are sufficiently wilted to permit handling without any danger of breaking them, I begin to haul in. For the leaves to wilter requires only a few hours.—If the tobacco is not already as yellow as I wish it, (which is seldom the case) in order to *brighten the color, I crowd it close on the sticks, and the sticks sufficiently close together for the leaves to touch slightly.* I leave a space on every tier of six or eight feet unoccupied, so as to have the opportunity, if it should be desirable, to give the tobacco more space. Having succeeded in obtaining as bright a color as I wish, my next step is to separate the sticks several inches before having a fire kindled of dry, half rotten pine wood. This should not be allowed to *blaze*—only to smoke. Fire from wood of this description will not make smoke strong enough to leave behind it either unpleasant smell or taste. It merely *warms* the tobacco faster than it would do from close crowding, and makes it yellow. When the color is sufficiently bright, I have fires of charcoal made up under each tier hot enough to raise the temperature of the house (which should be close) to 110° or 120° Fahrenhite. This heat should be kept up constantly. If it is, the tobacco will, in three days, be cured. I take it down for stripping as soon as I can, when it is in order. After stripping, it is again put on the sticks and placed on the tiers in the same close manner as when first brought to the house. If the weather should be unpropitious I can then separate the sticks and give it room so as to kindle a light fire under it at any time I may think it desirable from dampness."

We append an article from a correspondent of that excellent paper, the North Carolina Planter, on the same subject:

Here follows the communication from Walnut Cove, published in our July Number.

*For the N. C. Planter.*

RICHLANDS, Onslow Co., N. C.,
August 28, 1858.

MR. EDITOR:—You invite farmers to write their experience, &c., in plain terms, in order that each other should be benefitted.—Now I will say a few words, in my old broken way. If a man is not learned, he sometimes can give ideas to those that are; therefore I will commence by asking the question, Do you North Carolina farmers ever have anything to do with the Legislature of North Carolina? If you ever have, now is the prettiest time to speak to that body that has ever offered since my remembrance—political strife being now at rest, and no party dictation to gratify.

We farmers should do what the Declaration of Rights, section 18, authorizes us to do—"meet together, and consult for our common good, and apply to the Legislature for redress of grievances." The section reads thus: "That the people have a right to assemble together, to consult for their common good, to instruct their representatives, and to apply to the Legislature for redress of grievances."

Section 12 reads thus: "That no free man ought to be taken, imprisoned, or disseized of his freehold, liberties, or privileges, or outlawed, or exiled, or in any manner destroyed, or deprived of his life, liberty, or property, but by the law of the land."

Now is the existence of free negroes among us such a grievance, that we should apply to our Legislature? My experience says yes. They are a people that very few want about them. They are looked upon by the community as the meanest people among us. The slave stands superior in my estimation, as a class, in point of veracity, or any thing else. There were some raised in my neighborhood, and when I was a boy among them I used to respect them, as other negroes; and since they have grown up, they have turned out to be a worthless set of people. I have often wished they belonged to some white man, as slaves, so that I could have the same respect for them as other slaves; and besides, they would be much better off.

Now farmers, (I say farmers, because you support everybody,) do you ever lose any fat hogs, pigs, lambs, &c., that you don't know what goes with them? Very often they go to raise these very people, that corrupt your slaves so much; plunder your farms, orchards, and many other things without mercy. They are strolling about so, day and night, that it is impossible to watch them as you can your negroes.

I see Wilmington (in an ordinance passed March 16, 1857) has noticed the free negroes coming into that port from other States, on board of vessels; making it a fine of $50 to leave such vessel, without a permit from the Mayor, &c. This much is very good, and I hope she will take a better hold of others, and all within our State.

I propose to get to work at once, get up petitions from every county in the State, and say to our members, get hold of it, and not let it go until they pass a law to get rid of such nuisances. Give them twelve months to get away or hunt their owners; and if they refuse, put them up to the highest bidder, and let the money be added to the common school fund. If they select an owner, let them go before some Justice of the county, so that he can certify to the same, and show that the negroes are subject to the owners' debts. All apprentice bonds in our courts should cease, so far as free negroes are concerned.

I think there is enough constitutional authority in the 12th section for such an enactment; if they should think differently, they can repeal the neck-breaking penalty for transporting free negroes out of the State, or converting them to one's own use.

A PLANTER.

---

TO DESTROY WORMS IN ORCHARDS.—*Editors Co. Gent.*—I see in your paper, a way to destroy worms' nests on fruit trees, such as common soap and whitewash. Now the best way that I ever saw, and the surest remedy without injury to the tree, is to take a gun and put in a good charge of powder, and put in a paper wad, and stand about eight feet from the tree. This will blow the nest entirely from the tree, and rid them at once without injuring the tree in the least. If any one doubts it, let him try it and be will be satisfied that I am right.

R. RISLEY, *Hockanum, Ct.*

## Essay on Clearing Land infested with Sassafras and Briars.

BY W. W. GILMER.

Repeated cropping in corn, wheat and oats, will but multiply these pests. The best plan to eradicate them, I have found (after many trials) to be mowing them off in the month of May, and subjecting the land to close grazing. A field of mine, in 1850, was, after corn, so thickly set with sassafras and briars, that a friend remarked, that it afforded a good swarth nearly all over. It was sown in wheat and grass in the spring, and was afterwards grazed for four years to the utmost limit of its capacity; the bushes and briars were mowed but once, and to my great delight the entire field had not left upon it a briar or a bush except where a sassafras tree had been grubbed up. Grubbing a thick set field is a very costly operation, and will not cure the evil. The idea prevails in the valley of Virginia that our lands on this side of the mountains are far more liable to such pests than theirs. The reason for this impression is obvious not in the greater liability of our lands to be so infested, but in the different modes of treating them which prevailed in these localities respectively. Their lands are set in grass when fresh, and mowed and grazed from the year they are cleared, by which means these pests are kept under; whilst ours have been generally worked as long as they would pay, and in many instances much longer, and not grazed because we had but little stock, and were only mowed to a very limited extent, on which account the evil complained of has been checked by the remedial process I have suggested.

Let me not, however, be misunderstood on this subject. The mowing recommended refers only to the bushes and briars. He who has an abundant supply of corn-stalks, shucks, wheat-straw and chaff, has no need of hay for stock of any kind. If near to market, and hay can be sold for one dollar cash, then mow it; but if at a distance from market, and the staple crops are corn and wheat, mow not. It is my decided opinion that the cutting of a crop of clover-hay, and the taking away of the seed, will exhaust land as much as a crop of corn. Rich flats will stand, but common high land cannot.

The question may be asked, Why graze, if so much opposed to haymaking? Because cash payments are made to the land in grazing it, whilst but little is returned to it when it is sold off. Again, the grazing process proceeds slowly and but gradually despoils the land of its covering, while mowing leaves it suddenly denuded and exposed to the blazing summer's sun. I keep as fat horses and oxen as most persons, yet I have not, on a farm peculiarly adapted to the business, cut five tons of hay within the space of twenty years. Let those who have rich moist flats institute careful experiments to test the relative value of their production in corn and in hay. It will be found that the corn will give at least fifty bushels of grain per acre, while the rough food from that acre will amount to at least as much in quantity and be fully equal in quality to hay, so far as it is eaten. The difference, then, in favor of the corn crop, will be the nett gain of the amount of grain produced, the offal of the crop being fully equal in value to the production of the same quantity of land in hay.—*Southern Planter.*

* * *

Domestic Rules.—1. Do everything in its proper time.

2. Keep everything to its proper use.
3. Put everything in its proper place.

### Farmer Snug and Farmer Slack.

THE CONTRAST.

I have lately made some observation upon the difference between farmers, which with your leave, I should like to lay before your readers. In the first place, let us examine the premises of a good farmer. His barns and out buildings are a perfect model of neatness. Not a board missing on the barn, to let in the winter winds and snows; but all is warm and comfortable. His yards do not show the want of time to clear them, consequently, he does not lose one quarter of his manure—the most valuable and necessary article in all improvements in agriculture. Not only is this amount saved, but the pleasure of getting around the yards and barns is greatly facilitated, and greatly to his advantage. Examine his fences, you find no rails or boards missing—all is snug and in order. His cattle and sheep are in their places, not troubling his neighbors. Ask this man to take an agricultural paper, and nine cases out of ten he will tell you he is taking one already, but would like to renew his subscription for another year.—Ask him if he could get along without it, and he will tell you perhaps he could, but he would not as long as he could obtain one for so trifling a sum. This is the scientific farmer.

Now let us view the premises of farmer Slack, and mark the difference. His barns speak out—they want now and then a board, (and oftener *now* than then,) to keep the contents from the snows and storms of winter. His yards show the effects of easy habits—too much that is valuable going to waste. His fences denote the same want of care and attention. In some places only the traces of a fence are visible, so that with utmost ease, his own cows can go from field to field, or his neighbor's cattle partake of the herbage that his own so much require, judging from their appearance. Such is the farm of neighbor Slack, as he is termed. Ask him to take an agricultural paper, and mark his answer; ninety-nine cases out of one hundred, him or his prototype will tell you *no*, I want none of your *book-farming.*—He is contented to go on in the same routine his father did before him. To such I would say, of the two, give me the book farmer, for that is the kind of farming for me. Moreover, I would ask what is it that makes the difference between the two farms I have represented. One takes an Agricultural Journal and studies his profession, while the other does not.—The contrast is drawn from facts which have lately come under my observation, and are not exaggerated.

*From the S. C. Farmer and Planter.*

### Raising Corn.

MR. EDITOR:—In a great many articles published in agricultural works, the plan proposed or recommended for any particular crop, is such as may suit very well for some small favorite "patch," but is hardly practicable for the whole crop. This does a great deal towards detering farmers from scientific, or "book-farming," as it is generally called. Their practical minds are convinced at a glance, that the plan proposed cannot be put into practical operation for a whole crop, and they throw down the book and plod along in the old way.

Now I propose to give my plan (the plan I have practiced for some years) for raising corn. And although I am aware that I shall advance nothing new, yet I would remark that it is not necessary that a man should adopt every thing new, thinking it is therefore the best; but it is frequently very well to understand the *best old plan.*

In the first place I would recommend that the land should be broken up twice, close, and deep as the nature of the soil will warrant or require. But a great many farmers, from a lack of sufficient horse power, or other hindering causes, find it impossible to break twice by planting time. In this case, one breaking-up will have to do, but this one should be thorough, close and deep.

Now with regard to the manner of planting, I am aware that a great many of the best farmers of the country are in the habit of drilling their corn, and I admit that where the land is liable to wash badly, this is the proper plan; but I submit it to the decision of any practical farmer, if a corn crop is not much more easily cultivated when planted in hills, than when drilled.

Then lay off the rows 4 by 4, or 3 by 5 feet, as the quality of the land may require, and drop the corn in the crossing, two, three or more grains in a place, if the ground be rough, so as to insure a stand of corn at the start; for all farmers of any experience are aware that it is infinitely better to thin out than to replant. Cover with a small scooter plough, going *four* times to each row, running very close, and deep as we can well go. Thus the ground about the roots of the corn is well broken—a very desirable point, and which you can never do if you wait till the corn comes up. Let it stand until just before the corn begins to come up, or till the first stalks begin to peep through the ground.—Then run a harrow over it; if the ground be light and loose, a light harrow will do; but if the ground be rough, or if heavy rains have fallen so as to bake it, weight should be placed on the harrow so as to stir up the surface. This breaks the crust formed, and admits of the corn coming up better, and if any grass has come up, it will effectually destroy it, which is an important item at the start.

As soon as circumstances will admit after the corn comes up, commence ploughing out the middles with small, long shovels, or side ploughs; and although you ran four furrows in covering, yet from the fact that very small ploughs were used, the ridges will be narrow, so we can run close enough to lap the dirt around the corn. Let the women and children, or such hands as are unable to plough, follow with hoes, thinning out to one stalk, and cutting such weeds and bushes as the ploughs may leave. The land is now in first rate order and well broke.

In from three to four weeks plough over again, using larger ploughs this time, and as the corn is now grown to some size, you can run close enough to wrap the dirt around the corn.—Let the hoes follow, cutting out such bunches of grass and weeds as the ploughs may have left.

Again, in from three to four weeks, plough over again, but not so deep as heretofore, and the work is done.—That is, as a general rule, three ploughings will make a crop. But there is no rule but has some exceptions, and it may sometimes be necessary to plough four times.

Now one word more in regard to my manner of planting. Some will say it takes too much time to cover with *four* furrows; but it is my opinion that this is the most important item in the whole management of the crop—that is, getting it planted in good order. And we should take time and plant right, although we should be a week or two later in getting done.

A word more in regard to seed corn, and I will close this already too lengthy article.

It is a well established fact that to keep up a healthy and prolific stock of animals of almost any kind, we must *mix the breed.* I think the same rule is equally applicable to corn.—Consequently I always plant as many varieties as I can conveniently get.—White, red, yellow, gourd-seed, &c., mixed together indiscriminately; letting the white predominate, however. The result of this is, that my corn is always sound. While some of my neighbors who planted last year of one variety only, are now complaining of the unsoundness of their corn, I have seen but very few rotten ears in my whole crop. CORN STALK.

## A Word about Your Sheep.

Seperate your ewes that will have lambs from the rest of your flock, and give them special attention. If any of them are weak or poor, give them good nourishing food. Sliced roots, with meal, in very moderate quantities, may be given. There is danger, however, of over-feeding, and if the ewes have been well wintered, very few will need extra food. Be very careful to keep all dogs away from the ewes, and everything else that will alarm them. Quiet rest, good shelter, and even good feeding are grand points now, as always. About this time, or little later, the ewes should be "clotted," or "tagged." The advantages of this operation are, that the ewes will be neater after lambing, the lamb will suck more easily, and the shepherd will more readily see their exact condition. In handling the ewes, treat them very tenderly.—Do not hurt them or alarm them.—Both ewe and lamb are often sacrificed to a little heedlessness and cruelty.

As to the rest of the flock, keep them on good food, and give them shelter during the spring storms. See tha no weak sheep get cast in some corner, and chilled or starved to death The best way to avoid this is to have a yard near the barn, to serve as a hospital. Place the weak ones here and nurse them as they need. If your sheep have been fed on dry food exclusively, they have the stretches which are caused by constipation, or excessive costiveness. In such cases feeding them with green food, or scalded shorts, boiled turnips, and giving them a dose of linseed oil, (half a small tea-cup full) with a raw egg, will generally effect a cure.

*From the Fayetteville Observer.*

## Chinese Sugar Cane.

*Letter to the Editors of the Observer, dated.*

SIMMONS' TAN YARD,
Montgomery Co., N. C. Aug. 28.

*Messrs. E. J. Hale & Son:*—For the benefit of the public I drop you my experience in making syrup from the Sorgho, or Chinese Cane. The severe drought has cut short the cane crop in this region one half. I have just started a mill, after one advertised in the Southern Cultivator, with three rollers, which answers admirably; I have two kettles, holding fifty gallons each, one of copper, the other of iron, put up in neat furnaces with chimneys. My hands commenced making syrup last Monday morning; have made 13 to 15 gallons per day. I have several ten gallon juniper tubs to receive juice and bear to the kettles—the mill will grind out twenty gallons of juice per hour. I put one careful black woman to attend to the kettles, who has already learned exactly what thickness to make the sprup so as to be at its best. I at first had it taken up at boiling down to six measures to one; this is quite too thin, and such as this would undoubtedly sour. I then boiled one kettle down to ten gallons to one, simmering very slowly at last; this was quite candy when cold, and of the very finest I ever saw. I am now barreling up for table use, put about eight gallons of juice to one of syrup, making about the thickness of good honey, and very much the color. We should always remember to slack the fire for two or three hours before taking off. I am making for my neighbors for one-fourth, they hauling the cane. Yours truly,

L. SIMMONS.

---

PARALYSIS RESULTING FROM TOBACCO TIN FOILED.—Within a few years past tin foil has come into very general use in the place of paper, as an article in which to put up chewing tobacco for general use. The change was convenient, and the new article grew into favor among tobacco chewers. At first consumers had to pay a pretty good price for it, but of late the article has been cheapened. But it has just received a blow that we think must terminate its entire use.—It is now asserted, and with severe experience to support it, that the tin foil has dangerous poisonous qualities.—Two cases have just arisen that are calculated to give a great celebrity to this belief. Police Justice Bagg, of Detroit, and a prominent citizen of Cincinnati, have been attacked by severe strokes of paralysis, induced, as the physicians declare, by the poisonous influence of tin foil used by tobacco venders. If this judgment be sound, we may expect to see at once a general abolition of the use of the article.

---

The beneficial effects of charcoal in stopping putrefaction are now well ascertained; fish or meat may be restored by boiling charcoal with them.

---

*From the Fayetteville Observer.*

## Fruit Growing in Richmond.

A friend at Rockingham, an enthusiastic and intelligent cultivator of Fruit trees, (from whom we shall always be glad to hear, as he promises) writes us:

ROCKINGHAM, N. C., Aug. 28, 1858.

*Messrs. E. J. Hale & Son:*—I have seen in some newspaper notices of Watermelons of large size and fine flavor. On the day after our election, I ate at the house of Jas. P. Leak, Esq., in company with several friends, a part of a melon which weighed forty-three pounds. It was of delicious flavor throughout. As Pomologists say of the Beurre d' Anjou Pear, it was "fine grained, sweet, juicy, and delicious to the core." Have you seen such—or what is better, perhaps, have you *tasted* such?

Our vicinity can boast of more than fine Watermelons. We have growing in the village and neighborhood, as fine a collection of apples, peaches, plums, pears, and other fruits, as can be found anywhere in the State. If you have any doubts upon this subject, and choose to adopt the best means to remove them, visit us during the next fruit season, and you shall have *crammed down your throat* evidences which no man can gainsay. Will you do it? We shall see.

It is just as easy to raise White Winter Pearmain Apples, as Crabs; George IV peaches, as the bitter starnbigs frequently seen; Bartlett and Seckel and White Dozanni pears, as common "chokes." Why do people allow other sorts—worthless ones to cumber their grounds? Within a few years *our* people shall *see* and *appreciate* the luxury of that kind of fruit, which maketh the heart glad and the stomach vigorous and healthy. If they do not it shall not be my fault.

The foregoing may occupy a portion of the Agricultural, or Horticultural columns of your paper, if you choose. Hereafter, if time and inclination allow it, and your consent can be had, I may give your readers the benefit of a little I have learned within the last ten years upon the subject of Fruit Culture. I have a passion for the subject. To gratify it, without incurring too much expense, I am about to start in company with several gentlemen of this vicinity an orchard and nursery near the village. We shall also plant a vineyard, and thus hope to be able to supply, after a while, our friends, by gift and sale, any quantity of fruits and fruit trees, and a *little* wine which will do for the "stomach's sake"—pure and unadulterated. After a while we expect to have fifty acres in vines. But I'll stop that—it will dissatisfy you pent up folks with your lot.

Yours, &c., POMOLOGY.

---

*From the Fayetteville Observer.*

## Peach Culture.

*Letter to the Editors of the Observer, dated*
BRANCHVILLE, S. C., Aug. 20, 1858.

*Dear Sirs:*—Having a short time since called attention to the value of the peach crop, as designed for a northern market and otherwise, I now proceed to give some hints as to the method used in this State, where its cultivation is made a business. The "hints" referred to were furnished me by Mr. H. W. Ravenel, of Aiken, who has for years been successfully engaged in horticultural pursuits, and is a gentleman of much general information. He owns a fine orchard, very near that of the Hon. William Gregg, Kalmia, and his peaches were among the earliest in the New York market.

Mr. Ravenel says, "the best soil for the peach I find to be over a high and dry pine land region. The trees are healthier and the fruit more highly colored and flavored than on the lower and richer lands. It is *essentially necessary* to cultivate in some way the soil of an orchard, or in a few years the trees will die out. On this account it is best therefore to plant at such a distance that some crop may be advantageously grown between the trees, say 20 feet square, or thereabouts. Here, on my poor sand hills, I have planted 12 feet square; but I expect to give up the land altogether to the trees, and give the ground frequent stirrings with the plow and hoe.

If the ground has been newly cleared, it should be well broken up with the plow, and the holes for the trees—young trees from the nursery—should be opened about 5 or 6 feet in diameter, and at least 18 inches to 2 feet deep. This point is often neglected, but if attention is paid to it, the labor is ten-fold repaid in the healthier and more rapid growth of the young trees.

The season for planting is any time during the winter, from the fall of the leaf to the shooting out of young leaves in the Spring, though I would name the months of December, January and February as most advisable. In order to have good fruit, it is advisable always to procure budded or grafted trees, which insures you a certain kind well known to all fruit growers. Trees from the nut are always uncertain as to quality and time of ripening. Our plan here is to make a selection of certain kinds of trees from the nursery catalogues of the choicest qualities, which are known will give us a succession of fruits ripening through the season.

The trees when received are then planted carefully in a certain order, beginning with those which are earliest, and so on to the latest varieties. This mode places all that ripen together, in a body, so as to be more easily gathered.

The trees when received from the nursery, if in any great number, should be unpacked and buried in trenches temporarily, as otherwise they would suffer before the planting was completed, care being taken to keep the varieties all distinct, and with their labels.

Before being planted, each tree should be examined, the bruized or dead roots cut away, and the limbs cut back to the body, leaving on the bare stem. This insures a vigorous growth of new wood, and a better shape to the tree. Perhaps the most important point is in the proper and careful planting of the tree where it is to stand. The hole must be filled up or deepened, so as to let the tree stand somewhat deeper than it did in the nursery. Be careful also to have them in line, as in the after cultivation the plowing is much easier. In opening the holes, my plan is to draw out all the surface earth which is richest on one side, and the subsoil or yellow earth on the other. After the tree is adjusted to its place, draw in enough of the soft pulverized upper soil around the roots to cover them lightly, then with the hand push in the earth closely, in and among the small roots, so as to have it compact and without air-holes. The roots should be in close contact with the soil, otherwise they suffer. If the soil is moderately fertile, no manure will be necessary; but up here, where the soil is so barren, we use with success a little guano, sprinkled about the hole after the roots are lightly covered, or a spade or two of rich bottom soil, scrapings, &c. In no case ought much rich animal manures be used. The rest of the surface earth is then drawn in and pressed gently about the roots, and afterwards the hole is filled in with the subsoil, thus reversing the soil. This gives the roots as they grow a good soil in immediate contact, and insures a fine growth. The soil (as I mentioned above) must be kept clean of weeds and grass. If the growth has been a vigorous one, the trees should be pruned the next winter by cutting back about one half of the summer's growth, and giving the tree a symmetrical shape. I have found by experience that our peach trees (and indeed all our fruits) should be allowed to branch near the ground, say from 12 to 18 inches, thus protecting the trunks from the heat of the sun. Peach trees should be trimmed every winter by shortening back a portion of the most vigorous branches, and preserving the shape of the tree.

The two worst enemies of the peach are the borer and the curculio. The former attacks the tree at the ground, eating around under the bark. The only effectual mode of destroying them is to search the trees two or three times a year and take them out. Various plans have been used for *preventing* their attacking the trees, but none are considered effectual but the first. The curculio is often very destructive to small orchards, and the best known plan for keeping them in check is to allow hogs free access to the fallen fruit. In our large orchards they do but little harm; we have enough to spare them what they need."

## Iredell County Items.

Rain.—Rain is come at last, and although too late to benefit corn it will advance the growth of potatoes, and prepare the soil for seeding wheat and turnips.

Chinese Sugar Cane.—It is reported that the sugar cane culture in Iredell this year will prove very satisfactory to those that embarked in the business. There is now no doubt of the importance and success of the Sorghum.

Fat Hogs.—In the midst of short crops, there is one favorable item.—1857 was famed for a very large mast, upon which the hogs have fed and fattened and grown, and the swine running at large in the woods now, are quite fat enough without corn-feeding to bacon at the proper season. This is common in the oak region generally. Therefore very little corn will suffice for them at killing time, and we venture the aseertion that the quantity of pork will be more and better this season than for several past years.—*Iredell Express*, 11*th inst.*

Southern Peaches at New York. The Journal of Commerce says that New Jersey and Deleware, long the peach growers for New York, are failing; the supplies lessening every year. The market this year, it says, has at no time been better supplied than while the shipments from the South continued, nor have prices been lower. The Southern peaches continued in a sound condition long after other varieties, grown nearer home and plucked much more recently, became worthless from age. The experience of the past summer will be likely to greatly stimulate shipments from the South, in future years.

A Quick Cure for Founder.—Clean out the frog of the foot. Let it be well cleansed by scraping off all dirt, &c.; raise the foot so as to be level—spirits of turpentine, a sufficient quantity so as not to run over the hoof; then set the turpentine on fire and let it be entirely consumed. If the above does not cure a foundered horse as soon as the operation is over, then your readers may doubt all further receipts.

For colic, drench with a pint of sweet oil, is a valuable remedy.

*Cotton Planter.*

Founder in Horses.—Take a tablespoonful of pulverized alum, pull the horse's tongue out of his mouth as far as possible, and throw the alum down his throat. Let go his tongue and hold up his head till he swallows. In six hours time—no matter how bad the founder—he will be fit for moderate service. I have seen this remedy tested so often, with perfect success, that I would not make five dollars difference in a horse foundered, if done recent, and one that is not.

E. L. Periam.

## The State Fair.

The Newbern New Era, speaking of the next State Fair, which commences on the 19th October, says:

These annual exhibitions of the Agricultural and Scientifiic productions of North Carolina have already done much to develope the latent energies and incite a spirit of generous rivalry among the farmers and mechanics of our State; and who can tell, in the lapse of time, what vast and important results these exhibitions are destined to accomplish! We sincerely hope that Craven and the surrounding counties will not prove themselves laggards in this great enterprise. They have the facilities to compete, at least, with the most of their sister counties. All that is wanting is for them to make a determined effort.

**Prevention Better than Cure.**—An intelligent friend near Wadesboro' furnishes us with the following mode of treating his cattle to prevent their taking the cattle disease:

*Fay. Observer.*

Near Wadesboro' Anson Co. N. C.
July 30, 1858.

Editors Observer:—The "cattle disease" noticed in the last *Observer*, has made its appearance in this section, and is spreading with great rapidity. Immediately on hearing of its existence in the neighborhood, I, at the suggestion of an experienced farmer and stock-raiser, commenced giving to each cow, about one tea-spoonful of copperas and a small handful of salt in a small quantity of meal;—and as yet there has not been a single case of the epidemic among my cattle.—The disease is all around us, and proves fatal in many instances. My neighbor who recommended and is using the above, informs me that his cattle have also escaped thus far. It is certainly worth a trial.

Yours, &c., L.

**Cure for Hog Cholera.**—Mr. Jackson gave me a bit of his experience with this troublesome complaint, including a remedy which proved beneficial, and at length affected an entire cure. This was to put tar in the bottom of the trough—say a pint in one twelve feet long, and a couple of ounces of flour of sulphur; then one ounce of dissolved saltpeter was put with the swill into the trough once a day, and chloride of lime was sprinkled about their sleeping places. They seemed cured, but after running to pasture about a month were again attacked, when a second trial of the same means finally drove off the disease.

**Trap for Sheep-Killing Dogs.**—Make a pen of fence rails, beginning with four, so as to have it square, and as you build it draw in each rail as you would sticks in making a partridge trap, until your pen is of sufficient height, say five feet. In this way you will construct a pen that, when finished, will permit a dog to enter at the top at pleasure, but out of which he will find it difficult to escape, should he have the agility of an antelope. All you have to do to catch the dog that has killed his sheep, is to construct the trap, where a dead sheep is left as directed, after an attack has been made on your flock, put a part or a whole of a sheep that has been killed in it and remove the balance to some other field. In a majority of cases the rogue and murderer will return the succeeding night, or perhaps the next, and you will have the gratification next morning of finding him securely imprisoned. Some may object to the plan, perhaps, on the ground that you might catch an innocent dog. If so, he can content himself by not trying it. For my own part I should pronounce the sentence of guilt on any dog caught on *my farm* within three nights after my sheep had been killed, and execute the law speedily without any qualms of conscience.

*Southern Cultivator.*

**To Grow Grape Cuttings.**—Have you a choice grape cutting that you want to grow? Then go to the woods, dig some roots of a wild grape vine, cut them into pieces of about six inches long, cut your choice grape vine or cutting into pieces of only one, or at most, two buds; insert the lower end by the common cleft grafting method into the pieces of wild vine root; plant in earth, leaving the bud of the cutting just level with the top of the ground. Every one made will grow, and in two years become bearing plants.

**The Borer.**—Mr. Travis, of Natick, Mass, states that a mixture of one part salt, two parts fresh slacked lime, and two parts soft soap, applied to the lower limbs and the body of the apple tree, after first scraping the tree gently, will prevent the borer from depositing its eggs in the bark. It should be applied about the middle of April. He states that the success of this remedy is complete.

# EDITORIAL.

## RALEIGH, OCTOBER, 1858.

☞ The Postage on the N. C. Planter is ½ cent on each No. if paid quarterly in advance; or 1 cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year to any place in the United States.

### The State Fair.

The time for the annual meeting of the North Carolina State Agricultural Society, and for holding the State Fair, is close to hand. On the 19th, 20th, 21st, 22d, and 23d of this month (October) we hope to see a larger number of the Farmers, Fruit growers, Mechanics and Citizens generally, than has ever been called together on these interesting occasions. Their object is to diffuse useful knowledge among our population engaged in all the industrial pursuits of life, and we hope to see a continued and increased interest manifested in them; and to see on the approaching occasion a generous spirit of rivalry among all classes, to exhibit the fruits and products of their labor, skill, ingenuity and enterprise.

To the Farmers they are of especial interest. Three-fourths of our people are engaged in Agriculture;—all classes and professions are supported by the products of the soil, and any scheme that has for its end the elevation and encouragement of the Farmers, should meet the hearty co-operation and support of the whole community.—All should feel an interest in the exhibition, each emulous to contribute the most for the general good, to gather suggestions for their own improvement and to communicate what they know to others.

These Agricultural Societies are diffused all over the State, and the experience everywhere, is, that they have been the means of a vast deal of good, in disseminating useful hints, creating a taste for scientific knowledge and experiments and eradicating exploded notions and prejudices.

The day is not far distant when science in connection with agriculture will be a direct necessity. Our best lands are now under cultivation, and if we do not learn to arrest the premature waste that has been suffered to go on for years and to restore our exhausted old fields, soon we will be in a condition by no means enviable, and will then begin to understand, perhaps, that scientific agriculture is no humbug. We believe, however, that a brighter day is dawning for our State. The interest already manifested augurs a hopeful future for our farming population, and we want to see this feeling stimulated and encouraged until every man engaged in the occupation, learns to look upon agriculture, fruit and stock raising as a science, worthy of the highest mental as well as manual efforts.

Let there be a general turn out at the next exhibition, and let every one come with the double purpose of imparting and of gaining information; let none be detered from bringing up their specimens because the drought has cut short their high expectations. What the farmer does by his skill, combined with diligent industry, and not the accidents of the season, should attract special notice and praise.

### To the Planters of North Carolina.

At the instance of numerous Agriculturists of the State, the undersigned was induced to commence the publication of the NORTH CAROLINA PLANTER, a copy of which you have before you. On the 1st of January last, the first number was issued, and it has continued to make its appearance regularly, the first of each month, since that time.

Both the other Agricultural Periodicals—"The Arator"—and the "Carolina Cultivator"—had been discontinued; and it was deemed highly important to the great Agricultural interests of the State, that a *home organ* should exist in North Carolina. Notwitstanding the failure of every other enterprise of the kind, we determined to try the experiment, and see if North Carolina Planters would support *one* journal, devoted especially and exclusively to their interests.

We secured the services of highly competent gentlemen to take charge of the Horticultural, Pomological and Botanical departments of the *Planter;* and have been fortunate in securing contributions from several intelligent practical Farmers in furnishing editorial and communicated articles upon the general subject of Agriculture; and have enlisted the aid of our able and scientific State Geologist, Prof. E. Emmons, in advancing the enterprise by valuable contributions from his pen. We have published a much neater and more tastily gotten up Periodical than any of its predecessors; and yet after all these efforts to get up a first-class *North Carolina* Agricultural periodical, at the low price of *one dollar* per annum, we find, at nearly the close of the year, *less* than a thousand subscribers names on our books.

We lay these facts before those interested in the continuance of our publication, and will simply add, if they desire its continuance, the number of subscribers must be greatly increased. We ought to have five thousand subscribers; but if we can get two thousand to begin the next year with, it will be at least a guaranty that it will be sustained, and will justify us in making the improvements we desire for the ensuing year.

It remains now to be seen whether the Farmers and others in the State, interested in its continuance, will give us their aid in increasing its circulation. The times for holding our State and County Fairs is near at hand. It will be impossible for us to attend all of them, but if a few friends, at each of them, will exert themselves a little, our list can be increased hundreds, and perhaps thousands. Some will help us, we trust, freely, from a sincere desire to promote the Agricultural interests of the State in which they live and in which they are so interestedly identified; and we are willing to allow a liberal per centage to others who will energetically press the claims of the Planter. We have no doubt an industrious man can make several dollars per day at these Fairs, by soliciting subscribers for the N. C. Planter.—We offer 20 per cent. on all subscription money sent us, and hope to have several Agents operating for us at each and all the Fairs in the State. A. M. Gorman.

## Agricultural Editors Convention.

By the subjoined account of this Convention, taken from the New York Times, it will be seen that North Carolina was represented by our indefatigable Horticultural Editor, Mr. Westbrook:

Agricultural Editors in Convention.—There are some thirty-eight journals in this country (including two in California and one in Oregon) which are mainly devoted to agricultural and horticultural subjects. An invitation was sent out during the past Summer to the editors of these papers to visit this city during the present week to attend the Pomological gathering, and also to meet for becoming better acquainted with each other and arranging for a future general Convention if thought advisable. Some fifteen or twenty responded to the call, most of the others being detained by agricultural exhibitions at home. Among them we noticed Messrs. Byram, of the *Valley Farmer;* Vick, of the *Rural New Yorker;* Redmond, of the *Southern Cultivator;* Westbrook, of the North Carolina *Planter;* Harris, of the Gennessee *Farmer;* Clift, of the Hartford *Homestead;* Lyon, of the Michigan *Farmer;* Miner, of the *Rural American.* Also Messrs. Bateham, Dyer, Vail, Warder, Judd, Cummings, Hovey, Taber, etc.

At the meeting yesterday and on Tuesday, the importance of the Agricultual Press, and the desirableness of co-operation were discussed, and a general desire expressed for a gathering next season.

The following gentlemen were appointed as officers for the ensuing year:

*President*—H. P. Byram, Editor Valley Farmer, Louisville, Ky.

*Secretary*—Orange Judd, Editor *American Agriculturist*, New York City.

*General Committee*—Simon Brown, Editor *N. E. Farmer*, Boston; M. C. Weld, Editor *Homestead*, Hartford, Conn.; Joseph Harris, Editor *Genesee Farmer*, Rochester, N. Y.; Thomas Brown, Editor *Ohio Farmer*, Cleveland; J. W. Hoyt, Editor *Wisconsin Farmer*, Madison, Wis.

On motion of Mr. Clift the above gentlemen were by vote, requested to select the most suitable time and place next season, and issue a call for a general Convention of the entire Agricultural and Horticultural Press of the Country.

☞ Upon the members of the North Carolina State Agricultural Society, we think we have strong and especial claims for a liberal support to the North Carolina Planter. Its publication was entered upon at the instance of a number of its members, when all the other Agricultural Periodicals of the State had fallen through. It was a perilous undertaking, to engage in a work which so many had failed to succeed in. But we thought the Farmers of North Carolina would surely support *one* paper especially devoted to their interests, and we resolved to test it. We have nearly gone through the first year of its publication; but our support has been very meagre. The State Society will soon convene in this City—thousands of our Farmers will be here, and it will be a fine opportunity to hand in their subscriptions. We confidently rely upon the countenance and support of the State Society, in fostering and sustaining the North Carolina Planter. It is to its interest that it be well sustained.—Will they help us, both publicly and as individuals, in increasing the number of subscribers?

## To Visitors at the State Fair.

We hope to see hundreds and thousands of the Farmers, Planters, Fruit Growers, and all others engaged and interested in the cultivation of the soil of our good old State, present at the approaching State Fair. And as we have established this Periodical for the purpose of advancing these important interests, we hope all who come will not fail to avail themselves of the opportunity to subscribe for the North Carolina Planter. And in order that we may be convenient to all, we may be found at all times during the Fair at the Editor's Office on the Fair Grounds.—Come up, one and all, and pay one dollar for sustaining a Periodical especially adapted to the Farming interests of North Carolina.

☞ The liberal Premiums offered to competitors at the approaching State Fair, the complete arrangements for having everything conducted in a fair and impartial manner, and the extensive arrangements for having everything well conducted, will, we doubt not, make the next State Fair, the best managed of any we have had; if the men and women of North Carolina will bring up the articles for exhibition to make it so. Let every Farmer, Planter, Nurseryman, Dairyman, Fruit-raiser, Stock-raiser, &c., resolve to be represented in some one or more of the Departments for which premiums are offered. Our Mechanics of every class; and by far not least, the Matrons and Maidens of our good old State, we hope will also be here by large representations, both in person and with specimens of their ingenuity, skill and handiwork. Let all contribute to make the Fair of 1858, the grandest af-*fair* ever held in the State. It is by the exhibitions made on such occasions, that the character of a country and her people are to be judged; and knowing that if we *try*, North Carolina will take the front rank in every respect, in comparison with her sister States, we make an earnest call upon *all* her citizens, to contribute by every means in their power not only to make a *fair* showing at the Fair, by producing the *fairest* of the *fair*, but by an exhibition of all those things which will reflect a true representation of her greatness and prosperity.

## A Good Plan.

It is a rule with the Lynchburg Va. Agricultural Society, to have a committee, whose duty it is to meet every week, during the Fruit season, to inspect Fruit submitted to them, and that they make a record of the same—its quality and by whom presented—for future reference. At the annual meeting of the Society this record is examined and distinctions conferred on the meritorious. A spirit of emulation has been excited by this means and much good fruit has been brought prominently to view; the effect of which is to increase the culture and growth of choice varieties.

We think the plan a first rate one. By this arrangement much of our most choice and delectable Fruits have an opportunity of being examined, tested and compared, which it is impossible to preserve sound and good to as late a period in the year as that in which our annual Fairs are held—there is a chance for greater competition afforded, and consequently a more general spirit of emulation excited. We commend the plan to our State and County Agricultural Societies.

## North Carolina Tobacco.

We are pleased to see that the products of the "Old North State" command higher and better prices than those of any of her neighbors. This is particularly so in the article of tobacco, sales having recently been made in Richmond, Va., of a superior article, grown by Mr. J. I. Shaver, of Salisbury, at prices much higher than the average quotations. This lot consisted of two hogsheads; one was sold at $27 per 100 lbs, and the other at $31 75, do., coal cured, and branded as of "fine texture and flavor." The two hogsheads brought in the aggregate nearly $800.

Thus, as is always the case when brought into competition with others, North Carolina carries off the palm. The Richmond Whig speaks deservedly well of the efforts of the North Carolina planters to sustain the high reputation of their products in that market.

## North Carolina Cotton.

The first bale of new Cotton received at Wilmington this season, sold for 15 cents per pound; at Fayetteville for 12 cents; at Newbern for 15½ cents; and at Petersburg, for 17 cents. The latter was sold by Messrs. N. M. Martin & Bro. Hear what the Petersburg Express says about North Carolina Cotton. Edgecombe cannot be surpassed in *good* cotton. The Express, in speaking of the first bale of new cotton from this State, says:

"It was grown by Col. David Williams, of Edgecombe county, N. C., and possesses a beauty and consistency as pure and soft as down. It has a rich odor of the Paradise nut, a perfume which all good cotton should carry, and is as uniform in its texture as it is sweet. Col. Williams is one of the largest cotton planters in North Carolina, and is one of the firmest patrons of the Petersburg market. He has this year some five hundred acres in cotton, and expects to make three hundred bales."

## Stock for Exhibition.

It is often urged, and sometimes with reason, that, although stock should not be exhibited fat, yet that with the most fat upon it, always gets the premiums.

This is certainly the case occasionally, but there are few who will fail to admit that the best kept animals are usually the best. If a man neglects his animals, and brings gaunt, weathered beasts to the fair, everybody concludes that he wants the committee to do better by his stock than he does himself. If his animals are in good case, and not over fat, it is decidedly better. An animal of any of our best breeds of neat cattle needs to be fat enough to give that soft pliability to the skin, and silkiness to the hair, that one seldom marks in any animal in poor flesh, except a good milch cow. Bulls should be a little less fat than they would naturally be if fed on a generous, not fattening, diet. Cows in milk, of course, should not be fat; not in milk, they should be kept in good flesh. Young animals, too young to breed, may be fat, without any detriment to them, unless they are loaded with fat; and the committee will be a poor one indeed, if they cannot perceive the good points in an animal that is not burdened with flesh.—*Ex.*

Farmers of North Carolina, it is important that you make every effort to render your County and State Fairs, as attractive and useful as possible. We have heretofore endeavored to awaken the proper interest in this matter, but it cannot be too often urged. Make a trial for some of the premiums offered at your Fairs. If possible, attend your State Fair. You will not regret it.—Though the time and travel may cost you a trifle, you will hardly fail to be more than remunerated. Like "bread cast upon the waters; it will return after many days."—You will see and hear much to your profit. You will meet with the most successful farmers of the State. You will see the results of agricultural improvement in hundreds of forms and instances. You will gain a store of valuable information from personal observation, the like of which it would perhaps take months and perhaps years to acquire.

The premium list, rules and regulations, names of judges, etc., etc., of our State Fair have been sent to all parts of the State. Read it; look over it carefully; see if you cannot find a place where you can compete with a show of success. Come up, friends—lend a hand to an enterprise having for its object, your advantage.

◆

☞ We are indebted to Prof. Emmons, for the following article on

## Cutting Fodder for Stock.

The practice of cutting fodder is increasing every day, both at the south and north, and machines for this purpose are being improved every year. The direction in which improvements appear to turn, is to adapt the machine to cut the coarsest kind of food, as the largest cornstalks. A machine, for example, has been adapted to the cutting of the entire corn plant, by T. H. Wilson & Co., of Harrisburg, Pa. The plant passes through rollers by which it is flattened, and then cut into the finest pieces. It crushes the corn and cob at the same time, so that the whole plant becomes available for fodder. Some, perhaps, may regard the large stalk as of no value; and it is true that it contains much less nutriment than the leaf, but there is one consideration in feeding stock which is not often thought of. Food must have bulk.—Cattle cannot be fed upon meal alone; first, because it does not make bulk enough for the digestive organs; and in the second place, the teeth are not brought into use.—For the health of an animal, food must be masticated. If this is omitted, the teeth after a while will become diseased, the gums spongy and tender, and they would either fall out, or grow awry, and become not only useless, but painful.

Nature has her laws, and one of these laws is the requirement of exercise. Food should not be cut too fine, though there is but little danger of this. Still, it may even be cut too fine, if used constantly. But to return to the cutter. While this machine prepares the coarsest fodder for mastication, it at the same time disposes of the corn stalk in such a way that it is fitted for the manure heap. It becomes in this view alone an important machine; for old corn stalks, if left to decay in the yard or grounds, require a long time to rot. Corn which is intended for fodder, may be cut near the roots, and the whole plant with its ear of corn and husk cut up bodily for consumption. A great saving will thereby be effected; more, indeed, in one year than to pay for two or three such machines.

◆

## Of the Functions which certain Elements in the Soil perform.

By Prof. E. Emmons, *State Geologist.*

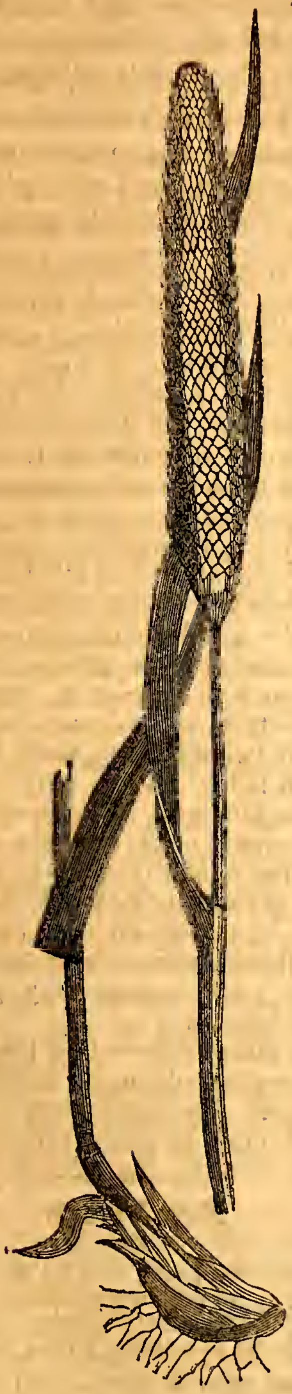
There are certain admirable, and it would seem also pre-determined conditions in nature, which are of the utmost importance to man, but which are liable to be overlooked by most observers. These conditions may exist in the machinery by which operations are carried on; they may exist in the chemical affinities of bodies, or in the existence merely of certain bodies whose presence seems to us to be unimportant. How is it with clay, which soils always contain? It never enters into the tissues of plants, for it is never found in the ash, unless by accident; and yet, there can be no doubt it is of the highest importance to vegetation. How, again, can this be important, seeing that it is not nutriment or food either to plants or animals? This, then, seems to be the case: It *retains* water, holding in solution the necessary food for plants. It intercepts the passage of food long enough to effect the necessary combinations and reactions in food already in solution. It seems also to divide and distribute the food equally throughout the soil; for it is agreeable to fact, that there is an equalization of nutriment in any given soil. We never find accumulations of lime, phosphoric acid, or potash, at points or centres in the soil, and yet, it is directly the reverse in rocks. When consolidation is taking place the lime becomes concretionary, the iron accumulates in centres, and often forms nodules. Thus those bodies which are called septaria, in rocks, are mostly calcareous bodies which have been separated from the general mass and collected into centres or into distinct layers. Such a result never takes place in the soil, for if it did, vegetation would be deprived of its necessary sustenance. There is, therefore, a force which equalizes the nutriment in the soil. This is undoubtedly effected in part by water, but the clay or alumina is the basis upon which this force operates, or it gives time for distribution, and prevents that rapid draining which would take place if the alumina was about. But another interesting body exists in the soil which is unlike that of alumina, for it is necessary both to plants and animals, as they are constituted. But leaving out of view the iron in a soil as one kind of aliment, or condiment, let us look for a moment at the part it plays in virtue of its chemical relations. Iron may be said to exist in three states or conditions in the soil· 1, as a protoxide, which is a greenish body; 2, as a peroxide, when it is of a deep red color; and 3, as a mixture of the two oxides; not simply as a mixture destitute of chemical affinity, for the two may combine and form a distinct compound similar in constitution to the black oxide of iron. However, both oxides always exist in the reddest of soils. Now the peroxide, or the deep red oxide, is almost insoluble, and certainly cannot be taken up as such into the tissues of plants. But in order to make the iron available, nature has placed in all soils organic matter. Now, in the presence of this third body, the peroxide is robbed of a part of its oxygen, and this organic matter is converted ultimately into a weak acid, capable of attacking the protoxide, and of dissolving it, whereby it passes into a condition in which the rootlets of plants may take it up. But this is not all; the protoxide always wants oxygen, and it is not at best until it gets it, and it cannot rob the already formed peroxide of an atom of its oxygen, and thereby equalize it between them. This it cannot do, but it can rob water in the soil of its oxygen, when it also in its turn becomes a peroxide. Now when the hydrogen is thus robbed of its mate, oxygen, it at once seeks another body with which to combine or marry itself to, and this body is nitrogen of the air, a kind of neutral mistress to oxygen, for air is really but a loose mixture of the two. But this combination is of the highest importance, for it forms ammonia, a pungent and volatile mistress, indeed—but loves to combine with water or acids, strong or weak. She is, however, the mother, as it were, of nitrogenous bodies, and becomes the flesh forming matter in the grasses and grain.—Now it is this curious provision in the soil for supplying nitrogen to the cereals, through the instrumentality of the different states of iron, secretly, yet constantly, working those changes so important to man. It would seem that a more direct mode might be devised for supplying nitrogen when it is so abundant in the atmosphere. It is possible some other mode might be devised; yet, when it is considered that if the properties of nitrogen were changed in a single particular, it would alter at once its present relation to these bodies. It is this fixity of character and predetermined constitution, which secures the harmonious working among the elements, by which all beneficial results are brought about; and though it may seem that nitrogenous or flesh forming bodies are made by a round about way, yet we may be assured it is the best way, and cannot be changed without breaking in upon that harmonious working which so strikingly proves the existence of an all-wise Creator and Governor of the universe.

(*To be continued.*)

*For the N. C. Planter.*

## The Grasses and their Functions.

BY PROF. E. EMMONS.



ALOPECURIES PRATENSIS.—(*Meadow Foxtail.*)

The name of this grass is derived from *alopex*, fox, and *oura*, tail, which expresses the form and shape of the spike, or foxtail grass. Darby, in his Southern Botany, does not describe this grass; and hence, it is inferred that it is not a common one in the Southern States. Still, it grows well in Maryland and the middle States generally, and will probably succeed when cultivated, over a large part of North Carolina. In the foxtail grass, the blossoms are arranged in cylindrical spikes, quite similar to timothy, from which, however, it may be distinguished by its having only one palea, whereas, the timothy has two. It has an erect smooth stem, by which it differs from the geniculated, or bent foxtail, which is a species of Alopecurus, common throughout the South. Besides, the latter grows in rice fields, or very wet places. It grows from two to three feet high, with a terminal spike shorter than that of timothy. The spike too, is softer and less harsh than timothy. In this country it has not received that attention which it deserves, inasmuch as it is an excellent grass for pasturage, vegetating with luxuriance, and starts up vigorously after being eaten down by sheep or cattle, provided it has a few days of rest; moreover, it bears forcing by irrigation. In consequence of its producing seed abundantly, it stocks itself. But it requires three years to come to maturity; and hence is not adapted to an alternate system of husbandry. This grass possesses certain advantages over timothy, especially in its aftermath, for timothy after being mowed, does not spring up anew, unless it is aided by frequent showers. Hence, the foxtail bears cutting and cropping better and sooner springs up and covers the ground again, which is an important consideration in all the cultivated grasses. It forms also a good turf or sward, a fact upon which its adaptation to pasturage is in part founded. This grass is adapted to moist soils, and is quite unsuited to dry sandy ones; yet the range of soils to which it can adapt itself, is large, and is not averse to any excepting the dry arid sands. It is therefore, better adapted to general cultivation than timothy. Its nutritive matter is, however, much dependant on the soil in which it grows; for in strong soils it is much increased. Such, then, are some of the qualities which recommend the foxtail to the attention of the husbandman. As regards its qualities for food, experience proves that it should be ranked high. Sheep are fond of it, and when mixed with white clover, one acre furnishes sufficient food for ten sheep, or will keep in good condition one cow during the entire summer.

PHLEUM PRATENSE.—(*Herdsgrass, or Timothy.*)

This is the grass for meadows; the hay produced being considerably better than that made from most of the grasses cultivated.—Its name is said to have been derived from Timothy Hanson, who is supposed to have introduced it into England. It has elongated cylindrical spikes, with glumes hairy upon their backs, and tipped with a bristle less than half their length. The leaves are long and flat. Root often bulbous and farinaceous, and hence sought for by hogs.

This grass grows best on rather moist cool meadows, where if the soil is rich in organic matter it becomes a very vigorous plant.—Under these circumstances we have seen it full five feet high.

For winter fodder, this hay is the best known for horses; yet it must be cut at the right time, which is when in blossom. We should not wait, however, for it to cease to show its blossoms, as it is many days in this state; yet it is not hard and woody until its seeds have ripened. Many infer from their observation that it is better to cut it late, as it then spends better. But the farmer must not be deceived. It spends better, because the stock cannot eat it as well. It attains perfection when in flower, after which its good qualities begin to diminish.

Timothy is not well adapted to pasturage. Its mode of growth and its general properties fit it for the scythe, and it is evidently intended for winter food.

Its nutrient properties are represented by the following analysis, by Prof. Way:

| | |
|---|---|
| Albuminous matter, (flesh forming,) | 11.36 |
| Fatty, | 3.55 |
| Heat producing, (starch, sugar, &c.) | 53.35 |
| Woody fibre, | 26 45 |

Ash of the dry plant, 5.28.

Timothy grows very well in counties bordering upon Virginia, in damp rich meadows. In the mountainous belt it is cultivated with as much success as in New England.—It has been a common practice to sow clover with this grass. The practice, however, is erroneous, as the former ripens too early, and loses its most valuable properties before the latter is fitted for the scythe. An acre furnishes from two and a half to three tons of dry hay, in good seasons.

---

☞ Will some of our Correspondents answer the following inquiries, and oblige us as well as the writer.—EDS. N. C. PLANTER.

*Messrs Editors*:—Can you inform us what hill-side plow is the best now in use, for *steep* hillsides? and where can it be procured? and how many horses are required to draw it? price, &c., &c.

We want one suited to steep hillsides, that will throw down hill all the time, while going either way.

Are apples good feed for horses? I have a horse that eats them greedily, and I have fed them to him sparingly, fearing cholic, this hot weather, as he is used constantly.—But once or twice I gave them to him plentifully with fodder as his only feed—taking care to salt him well in the mean time, and I have noticed no symptoms of cholic or other injurious effects as yet. The apples had fallen prematurely, some of them partly rotten.

If you should notice these matters, a paragraph in your journal may give the required information.

I may communicate with you again, should anything occur within my observation that would interest the agriculturist.

Yours, &c., B. BOOS.

---

## New Plough.

Alexander Dickson, of Orange county, N. C., has invented a Plough, and secured a patent right to the same, to do the work of a turning and subsoil plough, with one operation. The subsoil attachment can be taken away, and by a simple stock used as a subsoil or coulter, and the plough as a turning plough alone. It is so constructed as to answer all the purposes of a plough and coulter. The plough may now be seen at Mr. Burns' shop, and will be on exhibition at the next State Fair.

### Red and White Wheat.

The following rather curious and (to farmers) interesting revelation, we find in the Chambersburg (Penn.) *Spirit*. Have our Virginia and North Carolina farmers noticed anything of the sort in their wheat fields?

"From what we hear from our country friends and see in our exchange papers, it appears that the weevil confines its destructive operations exclusively to white wheat. In some instances, where part of a field was in white wheat and the remainder in red, the white was destroyed whilst the red sustained no injury whatever. In Lancaster county, many of the farmers intend to raise red wheat altogether till the weevil disappears, and it might be well for our Franklin county farmers to do so too. In some parts of Ohio and Western Pennsylvania, the wheat crop was almost entirely destroyed for several years in succession by the weevil.—If its ravages can be stopped by cultivating red wheat only, our farmers will certainly do well to give the white wheat the go-by till the weevil disappears."

### Tomato Wine.

We learn from the Tuscaloosa (Ala.) Monitor, that Mr. Martin Richards, of that county, presented to the Tuslaloosa Agricultural Society recently, a specimen of Tomato Wine, which was really a curiosity. It has very much the taste and resemblance of the best Sherry, though it is made solely from the Tomato, brown sugar and water, and consequently has no alcohol in it. The following is the recipe given in the Monitor for making it:

"Press the juice from the Tomatoes, and to every gallon of juice add one quart of water and three pounds of good brown sugar. Put into a cask or jar and skim for a few days. Then draw off the wine into jugs, but do not make them air tight until fermentation ceases. Of course the wine will improve by age."

☞ The Wilmington Journal says that a gentleman who has a garden not more than a mile from that town, has realized, from the sale of peaches alone, eightent hundred dollars during the past season.

# Horticulture.

S. W. WESTBROOK, EDITOR.

### Large Pears.

Mr. Thomas Hall of Duplin county, made us a present of some Duchess d' Angouleme Pears, the largest of that variety that we have seen this season, which he stated were about the average size of 150 specimens that were grown on the same tree (it being a dwarf.) We weighed the Pears, and they averaged something over 16 ounces each.—We have recently examined the prices of fruit in the Northern markets. We saw Bartlet Pears, the finest specimens, selling at twenty-five cents each, and no fine large Pears were sold for less than eight to the dollar. Such Pears as those presented to us by Mr. Hall, would readily bring fifty cents each. Suppose that Mr. Hall had one acre of such trees standing 15 feet apart, which would be 194 trees, which we will multiply by 150 Pears to each tree, which would be 29,100, even at 12½ cents each, would be $3,625! quite a snug sum for the products of one acre. And now we will refer to the speech made by the Hon. Marshal P. Wilder, at the last meeting of the American Pomological Society, held in New York, on the 14th, 15th and 16th of September, to sustain the above assertion about Mr. Hall's Pears.

### Southern Pomological Society.

In our April number of the Planter we made some suggestions about the formation of a Southern Pomological Society, and at the same time gave our reasons why we should form such an institution. In response to our proposition, we were highly pleased to receive a communication from Mr. S. McDowell, of Macon county, which was full of valuable suggestions upon the subject of Pomology and Horticulture, and we were very sanguine that others would favor us with their views immediately, from the fact that we had been corresponding with gentlemen in various sections of the South, who expressed themselves favorably toward the promotion of such an institution, and some of them even pledged themselves to make liberal donations, if necessary, to establish the Society upon a firm basis.

While we were looking over the columns of the Daily Wilmington Herald to-day, we were gratified to see the following caption and remarks by the Editor of the Charlotte Democrat, and a string of resolutions thereunto appended:

*From the Charlotte Democrat.*

Southern Pomological Society.—We call attention to the following resolutions passed at a meeting of the citizens of Charlotte, and which have been handed to us for publication. The formation of an association for promoting and encouraging the culture of fruit is an object worth the attention of all, but more especially the agriculturist.—A large amount might be made by raising good fruit, and at very little extra trouble.—As it has been proposed elsewhere to hold a convention in this town for the purpose of forming a Southern Pomological Society, these resolutions were passed in response to said proposition, and if our friends abroad will meet on the occasion designated we assure them that they will have the hearty co-operation of the citizens of this section. We hope the towns and country along the Charlotte and South Carolina Railroad will be represented, and also those in our State from here to Wilmington, as well as all others interested in the matter.

Here are the resolutions:

Whereas, We have noticed in the Columbia papers a proposition to form a Southern Pomological Society, and a suggestion that a meeting for that purpose be held in Charlotte, N. C., at a suitable time during the present autumn; therefore,

*Resolved,* That we cordially approve of this important move towards the promotion of an interest heretofore neglected and totally unappreciated in the South, and that we will heartily co-operate with the friends of the enterprise throughout the South in the formation of a Society to develop its utility and to mature the cultivation of Fruits.

*Resolved,* That the almost spontaneous growth of the Fruits raised throughout the South is a demonstration of the practicability of their production, and clearly shows that attention and cultivation is all that is needed to render them an important addition to our agricultural and planting interest.

*Resolved,* That we suggest Thursday, the fourth day of November, as the time for meeting in the town of Charlotte, for the purpose of organizing a Southern Pomological Society, (it being the first day of the annual meeting of the Mecklenburg Agricultural Society) and that we invite the friends of this interest generally to meet with us.

*Resolved,* That these resolutions be published in the papers of this town, and that other papers friendly to the enterprise are requested to copy.

We fully concur in the sentiments couched in the above resolutions, and we believe it to be emphatically the duty of the Southern press to publish the foregoing resolutions until the time proposed for the convention. We furthermore propose that the County Agricultural Societies in each one of the Southern States call a meeting and appoint delegates to attend the convention at the time specified. And we would furthermore suggest that the Presidents of the respective Railroads take into consideration the importance of encouraging the formation of Agricultural and Horticultural Societies, and so lessen the fare as to induce a large delegation to attend.

## American Pomological Society.

Mr. Westbrook, our Horticultural and Pomological Editor, has been absent, in attendance upon the meeting of this Society, in New York, during the past month. We fear therefore, we shall not have much from his pen for this number of the North Carolina Planter. Indeed, we reckon he is so "high up," at his successful competition with the North in the exhibition of Fruits, that he has hardly been able to touch terra firma yet. But not only has he cause to be gratified at the extravagant eulogiums bestowed upon his specimens of Fruit, but it is a matter of pride for the people of the South generally, and especially of North Carolina.

We subjoin an account of the Convention, as we find it reported in the New York Times; prefacing it, however, with the following Card, taken from the New York Herald:

St. Nicholas Hotel, Sept. 16, 1858.

*Editor of the New York Herald:*—As a North Carolinan I felt my State pride (I trust excusably) aroused on visiting the exhibition of fruits at Mozart Hall, on Wednesday. This exhibition is by the members of the National Pomological Convention now in session, whose proceedings are highly interesting to amateurs, and more so to those directly concerned in fruit growing.

To the "Old North State" is due the honor of having the finest and largest collection of apples, exhibited by Messrs. Westbrook & Mendenhall, of Guilford county. This is not the first time that these gentlemen have successfully competed with the fruit growers of the Union. Two years ago they bore off the palm in apples, and received orders from Northern and Western fruit growers for trees from their nursery.

Mr. Westbrook (who represents his firm here) tells me he only wants time (two or three years) to outstrip his competitors in peaches and pears also. This but confirms an opinion oftentimes expressed, that North Carolina occupies a position on the map of North America superior to most, and inferior to none of the States of this Union for fruit growing in its various branches.

D. OF NORTH CAROLINA.

American Pomological Society.—The seventh meeting of the American Pomological Society was commenced yesterday morning in Mozart Hall. Representatives were present from seventeen States.

The Hon. Marshall P. Wilder, President of the Society, took the chair. Delegates from other Societies presented their credentials and members paid their dues.

The President read his address; we give some extracts from it:

"Gentlemen:—I rise to announce the opening of the seventh session of our National Association, and to perform a service which its Constitution devolves upon your presiding officer. Ten years have completed their course since the organization of the American Pomological Society, in this commercial emporium. Some who were active in its formation, have fulfilled their earthly mission, and now rest from their labors.—Downing and others have passed away; but their names are still fragrant in our memories; and their works still live. May they live forever to enlighten and bless their fellowmen.

"The represetative arts of ancient Egypt contain delineations of delicious fruits, afterward cultivated in the hanging gardens of Ninevah, the interval lands of Babylon, in the vales and on the mountains round about Jerusalem. In Greece, Homer sung of the cultivation of fruit trees; Xenophon, Cato and Virgil mention, among other varieties of fruit, the pear; and Pliny, in enumerating the fruits cultivated at Rome, mentions twenty-two sorts of the apple, eight kinds of the cherry, more than thirty kinds of pears, a large number of plums and grapes, to which the soil of Italy was then and is still specially adapted. He also speaks of several other kinds of fruits, and of the perfection which the art had attained in his period; but it is a significant comment on that perfection when he adds that it was then a long time since the production of any new variety.

"Since the organization of this Society in 1848, its example has been followed by the establishment of the British Pomological Society in London; the Societe Pomologie de Belge in Brussels; and other similar organizations located at almost every point of our Union—all working in harmony for the attainment of the most reliable and important results. These are aggregating the experience of the wisest and best cultivators, creating a taste for this useful and divinely appointed art, proving what varieties are suited to each particular locality, and what to general cultivation. These, through the influence of the Horticultural and Agricultural press, are introducihg fruit culture from the Canadas to Mexico, and from the Atlantic to the Pacific, bringing its numberless enjoyments within the means of the most humble cottager, and multiplying the luxuries which crown the tables of the opulent. The large, luxurious and abundrnt fruits in the State of California, in the territories of Oregon and Washington, already rival, and in many instances surpass these of our older States, indeed of the countries of Europe.

"The transactions of our last session have been published generally by the periodical press of the United States. They were also translated and published in some of the languages of Europe; and your Catalogue has already become a standard in American Pomology. This it should be your object, at each biennial session, to revise, perfect and promulgate, as the best means of preventing those numerous impositions and frauds which we regret to say, have been practiced upon our fellow citizens by adventurous speculators or ignorant and unscrupulous venders, who sometimes use recommendations, hastily and judiciously given, or surreptitiously obtained, greatly to the injury of the purchaser and fruit grower, to the dealer and nurseryman, and to the cause of Pomology."

He then proceeded to discuss the question: Can Pears be grown for market at a profit? and in the course of his discussion adduced the following conclusive facts:

"The Fruit Growers' Society of Western New York, composed of gentlemen of deserved integrity and celebrity, some of whom are on this floor, and competent to defend their report, furnish the following instances from that section of the State.

"Three White Doyenne pear trees, owned by Mr. Phinney, of Canandaigua, one of them small, produces $50 to $60 worth of fine fruit.

"A tree of the same variety, owned by Judge Howell of same place, 70 years of age, has not failed of a good crop for 40 years, averaging for the last 20 years 20 bushels annually, and sold on the tree at $60 per year. This tree has produced for the New York market $3,750 worth of pears.

"Three large trees owned by Judge Taylor, of same kind, yielded, in 1854, 11 barrels, and sold for $137.

"A young orchard, owned by Mr. Chapin, of four hundred trees, eight years from planting, which produced in 1853 fifteen barrels, selling in New York for four hundred and fifty dollars."

"Similar results have been realized in the State of Massachusetts.

"William Bacon, of Roxbury, has about one acre devoted to the pear. The oldest trees were planted eighteen years since, but more than half within a few years. From two trees, the Dix and Beuree Diel, he has realized more than one hundred dollars a year, and for the whole crop, over one thousand dollars a year.

John Gordon, of Brighton, has three and one-fourth acres in pear orchard. This was commenced in 1841, there being only eight trees on the ground. There are now twelve hundred trees, planted in various years, more than one-half of which since 1854. The amount received for his crop, from that date to the present, has been from five to six hundred dollars a year, but he remarks, "If I had confined myself to a judicious selection of varieties, it would now bring me two thousand dollars per year.

William R. Austin of Dorchester, Treasurer of the Massachusetts Horticultural Society, has an orchard of between five and six hundred pear trees, mostly on the quince root.—These trees are about twelve years of age.—One hundred are Louise Bonne de Jerseys. They commenced bearing about three years after planting, and have borne regular crops ever since. They are very healthy, and only eight of the whole number have died since the orchard was commenced. No account of the crops were kept until the year 1851, but Mr. Austin's sales for the next six years amounted to $3,408.

The Messrs. Hovey of Cambridge, have a very large collection of bearing pear-trees.—From two rows, 210 trees, grafted on the quince, the crop has amounted, some years to 25 brrrels.

John Henshaw of Cambridge, planted about an acre of land principally with pears on the quince. On the fifth year thereafter, he gathered 120 bushels of pears, 70 bushels of which he sold at 5 to $6 per bushel.

A Buffum pear tree at Worcester, belonging to Mr. Earle, yield annually from $30 to $40 worth of pears. Mr. Pond of the same city planted in 1850 350 Bartlett pear trees, one year old from the bud. In 1857 he sold from these trees, 50 bushels of pears at $5 per bushel, or $250 for the crop.

Similar instances of success, in these and in other States, might be multiplied, if time would permit, to prove the age, health, and profit of the pear tree. So deep has the conviction of this truth become, and so uniform the success, that instead of planting trees as in former times, by the single tree or the dozen, cultivators now plant orchards of hundreds and thousands, in firm and reasonable expectation of large income."

Mr. Wilder dwelt upon the duty of pomologists to supply the people with good fruits at such a price that they might become, not the condiments, but the food of the people. After applying this idea to the pear he said:

"Our reasoning applies peculiarly to the grape. I hail with great pleasure the wide-spread interest of cultivators in producing new and choice varieties of this fruit, which, ere long, will put us in possession of kinds not inferior to the best European sorts. On this subject I had hoped to enlarge at this time, and to have shown its importance as a means of increasing individual and national wealth. The time is within the recollection of some present when our first native grapes were brought into cultivation, as the Catawba and Isabella. These are now so common in some sections that any man, if he chooses, may sit beneath his own vine, and pluck its rich clusters. Honor to the memory of those who introduced these valuable sorts! Success to those who are multiplying new and improved varieties from them! We know gentlemen in Massachusetts who have thousands of seedlings under cultivation. The same may be said of other sections of our fair land; and the day is fast approaching when from our eastern to our western shores, the tops and slopes of our hills shall be covered with clusters richer than those of Eschol, and, like them, give assurances of a land of promise. May that day soon come, when our markets shall vie with those of Italy, Sicily, and other grape-growing countries, where this luscious fruit is not only a luxury for the opulent, but the food of the humblest peasant."

Mr. Wilder concluded his address by resigning his position as President. By resolution, however, offered by Mr. T. W. Field, he was prevailed upon to retain the position for another term.

[Vice-Presidents were also elected, one from each State and Territory. Walter L. Steele is the Vice President elect from North Carolina.—[Eds. Planter.]

Mr. Field then read a paper by Mr. I. E. Berckmans, advocating the culture of fruit, and especially encouraging faint-hearted fruit-growers to find out what fruits were suited to their locality, and then to cultivate the most vigorous of these. He stated that he had seen more good fruits at one exhibition in Rochester or Boston, than in any twelve exhibitions he had seen in Europe. Let them not be disheartened by any obstacles. None could be greater than the oidiuam in Europe, but that had been overcome.

Mr. Field then read a paper on the adaptation of varieties of pears to different localities. He had never seen a single universal soil. The finest and most delicate were least general in their adaptation. Not more than half the varieties of pears were good for any single locality. He had been much interested in tracing out varieties which were brought over by the Huguenots. In conclusion he mentioned some instances of successful hybridization.

The President read a paper from Mr. J. J. Thomas. He says that the roots of his dwarf pear trees two years old cover the diameter of eight feet. The old supposition has been that the roots extend no further than the tops. But the tops of these trees were only two feet in diameter. Peach trees ten feet high were doubled in their growth by heaps of manure fifteen feet distant, and quadrupled by heaps of seven feet distant.

Mr. Walker of Roxbury spoke in favor of the publication by the Society of a catalogue of all the fruits which have been cultivated in this country. Then he proposed that they should have local catalogues for each State of good fruits, both for family use and for the market. He would have the catalogues give full descriptions and outlines of these fruits, and would have them completed Jan 1, 1860. Such catalogues could be sold for fifty cents; he would guarantee a sale of 20,000 a year.

The Business Committee reported that the Society should in its day discussions first take up fruits which promise well, and then the additions to this list.

The Treasurer's report was read; it shows $428 94 in the treasury, after an expenditure of nearly $400.

Conversational discussions are to be held in the evening. Last evening the subject was: Pear Culture.

### THE DISPLAY OF FRUITS.

The display of fruits, most of them brought by members of the Society, now on exhibition at Mozart Hall, is much superior to any ever before given in this city. Prominent in the exhibition is the most attractive display of apples we have ever seen—77 varieties by Westbrook and Mendenhall, of Greensboro', N. C. They are even more appetizing than the splendid collections of pears which occupy nearly two-thirds of the tables. A "strawberry apple" from Louisianna appears to justify its name. There are pears of all desirable and most undesirable varieties; grapes, among them beautiful specimens of the Diana, Rebecca, and Delaware; and some immense melons, which appear to be muskmelons in everything but size.—The principal exhibitors are:

Messrs. Ellwanger & Barry, of Rochester, who have 450 acres in trees, exhibit 200 varieties of pears and 37 of plums. Finer specimens of some of the pears have seldom been exhibited.

The Hon. Marshall P. Wilder, of Boston, exhibits 144 varieties, of pears, of the most beautiful size, shape and color.

Wm. Reid, of Elizabeth, New Jersey, exhibits specimens 104 varieties of pears.

Mr. Wm. L. Ferris, of Throg's Neck, exhibits 55 varieties of pears.

Mr. Sheldon Moore, Kensington, Conn., exhibits 5 varieties of apples.

E. M. Warren, Chelmsford, Mass, 8 varieties Summer and Fall sweet apples, 10 Fall and Winter sweet apples, 24 Fall and Winter sour apples, 30 early and Summer sour apples.

Messrs. Sharp, Smith and Manchett, Syracuse, exhibit 124 varieties of pears.

J. D. Ingersoll, Illion, Herkimer county, N. Y., 3 species of Delaware grapes, 2 Logan grapes, 1 unknown.

Dr. J. F. Boynton, Syracuse, 14 varieties of pears.

Mr. Lyon, Plymouth, Mich., 27 varieties of pears and apples.

Mr. W. H. Mitchell, Harlem, 13 varieties of pears and 14 varieties of apples.

Mr. C. H. Moore, New York, 1 seedling pear.

Mr. E. Ware Sylvester, Lyons, N. Y., 3 varieties of pears.

Prof. Mapes, 13 varieties of pears—most of them of superior excellence.

Messrs. Westbrook & Mendenhall, Greensboro', N. C., 77 varieties of apples and 13 varieties of pears. The apples of this collection beat the North, by a great distance, in size and beauty.

Mr. John G. Bergen, Brooklyn, 40 specimens of the Island pear, (a new variety) 20 specimens of the Bergen pear, and 12 specimens of the Englebert Lott.

Mr. James M. Paul, North Adams, Mass., 20 varieties of apples, and 10 varieties of pears.

Mr. S. P. Carpenter, New Rochelle, 3 new varieties of pear, originating in Westchester county.

Mr. E. G. Studley, Claverack, Columbia county, 10 varieties of apples.

Mr. W. P. Townsend, Lockport, N. Y., 38 varities of pears.

Mr. Joshua Pierce, Washington, D. C., 5 enormous cantelope melons, 18 to 22 inches long.

Mr. Charles Denning and Dr. Grant, of Long Island, exhibit very fine specimens of the Delaware and Catawba grapes.

## The Keeping of Fruit.

The best method of keeping fruit was discussed at the meeting of the Cincinnati Horticultural Society, a few days ago. Mr. Heaver deemed the subject of much importance, as from certain atmospheric causes the fruit of the present season seemed inclined to ripen much more rapidly than usual; and premature ripening is uniformly attended by premature decay. He had ound it beneficial to gather the fruit in the morning, while cool, and then keep it in a cool airy place. For keeping, pears should be gathered before fully ripe, and allowed to mature after pulling. The best position was in a cool, clean, sweet cellar. Fruit should not be in massive, nor even in double tires, so as to press upon each other. Mr. Mottler last year tried two methods of preserving his pears; one by putting them in oats in barrels, the other by first wrapping in paper separately, and placing them in boxes. Those in paper and boxes keep much the best. Mr. Buchanan supposed the best method of keeping fruit was in a tin box, in a cool dark cellar. He had now in the middle of August, the Virginia greening apple perfectly sound, of the last year's growth, kept in this way in his wine cellar. Dr. Warder said that fruit being placed in a dark and cool place nearly completed its isolation from the usual causes of decomposition, viz: light, heat, air and moisture. He would recommend the use of white, and certainly of clean paper. Mr. Laboyteux stated that this method of packing in separate papers had been practiced with great success by those who put up and shipped apples to Southern latitudes. One gentleman had pursued this course with great profit, in shipping apples to our Southern coast.

*For the N. C. Planter.*

## Can the European Grape be successfully Cultivated in the United States?

*Messrs. Editors:*—Were we to determine this question according to our ten years' effort and utter failure, and after witnessing the same results follow the attempts of all others who have been engaged in it, our answer would be prompt and emphatic, in the negative. But, notwithstanding the seeming paradox in the assertion, were we now to resume their cultivation, it would be with confidence ltttle short of certainty of success.

We will tell you why we say so. Our attempt and failure was upon the European plan, according to the best book authority on the subject. The result was, that against the third year our vines were so affected by mildew that the clusters of grapes were blighted before grown, and if any escaped blight they were punctured by insects, and rotted before ripening; so that at autumn our vines were utterly barren. I gave to a neighbor a vine of the black Hamburg variety, which he planted in the border of his yard and trained upon a scaffold. His grapes also rotted and fell from the same causes as our own. He had planted a Balm of Gilead tree contiguous to his vine, and north of it. In a few years its expanding branches reached above one corner of his grape arbor, after which the grapes hung on and ripened on that part of the vine, while they rotted on the other part not having the protection of the boughs of the Balm tree. At our suggestion he carried one section of the vine up into the tree, where it spread out in its wild and unpruned tangle amongs the tree's branches, and is this day laden with a heavy crop of grapes, nor has it ever failed at each returning autumn to furnish its fruit of large and perfect clusters, rich and delicious in taste. We hence infer that the buds and leaves of the Balm tree, abounding in a pungent aromatic substance, pleasant to the smell, but bitter to the taste, is fatal to all the enemies of the vine, and were it not that we do not wish to inflict upon you a lengthy article, we could produce cumulative testimony to prove the Balm tree to be a sovereign protection of the vine and its fruit. Let the vine be planted in a suitable soil, and protected by the Balm tree, we are confident that it will be unfailing in its fruit, as the vine above named has never yet failed of its fruit since being protected by the tree in the year 1837.

S. McDOWELL.

Franklin, Macon Co., Aug. 17, 1858.

◆

Keeping Cider Sweet.—A pint of mustard seed, put in a barrel of cider, will preserve it sweet for several months. We have drank fall cider in the month of May which has been kept sweet by this means.

# For the Ladies.

## FLORICULTURE.

Greenhouse.—The plants must now be moved to their winter quarters as soon as possible, admitting as much air as possible night and day, to keep them hardy, except when frost is likely to come, when the house must be closed up. Clean the pots and be sure the drainage is clear before setting them in the house; if the drainage is not good, they will be sickly. Syringe them over head in fine weather, doing so when the sun is about one hour high. Do not wet them overhead at night after moving them in the house.

Dahlias will now be in full bloom. Keep them nicely tied up to stakes, so the wind may not break them. If the colors are arranged properly, the effect will be very pretty. When the frost cuts the leaves, cut off the stems two inches above ground, three days after either lift them up and put them in the cellar, or cover them over with trash sufficiently thick to keep the frost from them.—If you take them up, turn the roots bottom up to drain off any sap remaining in the hollow of the stems.

Flower Garden.—Nothing of interest can now be done. When the frost has cut down the blooming plants, spade up deeply all the space possible to plant Hyacinths and other bulbous plants. The first and second week in November is the proper time. A rich deep sandy soil is best. Directions will be given for their cultivation and arranging of colors in the November No. of the Planter.

Evergreens must be planted this month and the first half of November, or be left over till early spring.

Decidous Plants and Trees may be planted as soon as the leaves are off until March next, inclusive, weather permitting.

Grass Seed must be sown the first half of this month, or be left till February next. If sown after the middle of the month, it will not give satisfaction, unless a very mild winter should follow. Be careful the manure used is free from seeds of weeds. No trash must have ever been on the manure pile in the shape of weeds, as they will surely vegetate, and without great care ruin the grass plat.

HAMILTON & CARTER,
Florists & Nurserymen.
Raleigh, N. C.

# Mechanical.

*For the N. C. Planter.*

## Some Tests for Detecting Counterfeit Coins.

BY PROF. E. EMMONS.

1. *Mechanical Tests.*—The most important of these is weighing or counterpoising a suspected piece with a genuine one of the same denomination.

It should be observed here, that a counterfeit must be very nearly, if not exactly, of the same size as the genuine coin, and it is readily seen, that where metals vary so much in quantity, that it is impossible to reconcile weight with size. A gold eagle, according to the act of 1837, must weigh 258 grains. The silver dollar must weigh 4,125 grains. If then, there is a variation of weight in a gold piece, amounting to three grains, it would make it suspicious, and a little more would condemn it. This arises from the exactitude of the United States machinery employed at the mint. In all the new pieces of silver coin, no greater latitude can be admitted than in the case of gold.—But these strict rules are not so applicable to the Mexican dollar. This, if forged, and having the fineness of 970, would weigh only 402 grains, instead of 416, which is its true weight. A Mexican counterfeit dollar varies from 20 to 30 grains less than the true dollar. If the size of a counterfeit is the same as the true, it must always be too light.

2. *Chemical Characters.*—The chemical relation of bodies to each other is always the same; nature here has her law. Aqua fortis always acts upon silver in the same way, and always produces the same result.

The colors of the solutions produced by any of the acid solvents is the same under the same circumstances. Hence, if a genuine coin is subjected to the action of nitric acid, it will behave uniformly with it, and its solution will always have the same color.

For the determination then, of genuineness, we may rely implicitly on chemical tests. Silver is soluble in nitric acid alone, and its solution stains the skin or nails of a dark blackish color, which cannot be washed off; but gold is insoluble in nitric acid—but if muriatic be added to it, it is dissolved.

But supposing that a piece purporting to be money, is plated with silver. The first solution in this case would behave as if the piece was genuine; the color of the solution would be blueish green, but if the silver is dissolved from the inside metal, which is usually nickel, the solution becomes a deep green. It would be an azure blue, if the inside was copper.

The foregoing facts will furnish a basis for the settlement of the question respecting the genuineness of a coin.

Color, sound, feel and smell, though not unimportant, are yet insufficient in themselves, to settle the preliminary question; but if we add to these weight and size, together with the results of the action of nitric acid, these will in all cases be sufficient, not only for strong *suspicion* of guilt, but also for a *verdict* of guilty or not guilty.

*For the N. C. Planter.*

LEACHVILLE, Aug. 10, 1858.

SIR: It is not perhaps generally known by blacksmith's, that a three cent piece will melt sooner than brass, therefore a brass key can be mended with a three cent piece, used as you would brass to braze iron. I have used them often to mend brass keys. Sometimes I put an iron bow on a brass key when the bow of the brass one is broken.

Should you think the above worth a place in your paper you can insert it.

Truly yours, A. L.

A WONDERFUL PUMP.—A wonderful invention has been on exhibition at 432, East 10th street, by James M. Edney. It is a pump, simple and durable, working by hand and lever power, and raising water with ease and facility to the unprecedented height of *one hundred and fifty feet.* It is a double acting horizontal force pump, made (pipe and all) of wrought and cast iron; no packing, no suction, and the least possible amount of friction, and raising water with ease and regularity by any two ordinary men for hours together, to the height of *one hundred and fifty feet.* Mr. Edney, 147 Chambers street, will furnish all the particulars.—*N. Y. Christian Advocate and Journal.*

## A. H. C. BROCKEN,

### 22 CLIFF STREET, NEW YORK.

MANUFACTURES OF

**GLASS SYRINGES, HOMŒOPATHIC VIALS, GRADUATED MEASURES, NURSING BOTTLES, ETC.**

Glass Ware for Chemists, Druggists, Perfumers, Photographs, etc. Green Glass Ware by the package. A liberal discount made to the trade. Orders from Country Druggists and Dealers solicited. Price Lists sent on application.

October, 1858. 10--3m.

---

## SCIENTIFIC AMERICAN.

### PROSPECTUS.

*Volume Fourteen begins September* 11, 1858.

### MECHANICS, INVENTORS, MANUFACTURERS AND FARMERS.

The *Scientific American* has now reached its fourteenth year, and will enter upon a new volume on the 11th of September. It is the only weekly publication of the kind now issued in this country, and it has a very extensive circulation in all the States of the Union. It is not, as some might suppose from its title, a dry, abstruse work on technical science; on the contrary, it so deals with the great events going on in the scientific, mechanical and industrial worlds, as to please and instruct every one. If the mechanic or artizan wishes to know the best machine in use, or how to make any substance employed in his business—if the Housewife wishes to get a recipe for making a good color, &c.—if the Inventor wishes to know what is going on in the way of improvements—if the Manufacturer wishes to keep posted with the times, and to employ the best facilities in his business—if the Man of Leisure and Study wishes to keep himself familiar with the progress made in the chemical laboratory, or in the construction of telegraphs, steamships, rail roads, reapers, mowers, and a thousand other machines and appliances, both of peace and war—all these *desiderata* can be found in the *Scientific American*, and *not elsewhere*. They are here presented in a reliable and interesting form, adapted to the comprehension of minds unlearned in the higher branches of science and art.

MUNN & CO., 128, Fulton St., N. Y.

TERMS:--One copy, One Year, $2; One Copy, Six Months, $1; Five Copies, Six Months, $4; Ten Copies, Six Months, $8; Ten Copies, Twelve Months, $15; Fifteen Copies, Twelve months, $22; Twenty Copies, Twelve Months, $28, in advance.

---

## W. W. DINGEE, & CO.,

### YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore at the prices named.

| | |
|---|---|
| An 8 horse power, including thresher and separator, | $165 00 |
| A 4 horse power, including thresher and separator, | 150 00 |
| A 2 horse railway power, including thresher and separater, | 145 00 |
| **A 1** horse railway power with thresher, | 125 00 |
| A fan that will clean grain at once running through, | 25 00 |
| A grain drill with grass seed-sower attached, | 75 00 |
| 2 or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, write to W. W. DINGEE, & Co.,

[6—6t.] York, Pa.

---

**I OFFER AT PRIVATE SALE A** TRACT OF LAND consisting of 230 acres, near the town of Lexington and within one mile of the Depot, with a good dirt Turnpike Public Road leading to the Main Street, 25 or 30 acres of which is the richest Branch bottoms, with a deep and capacious ditch to carry off surplus waters, and most of it in grass for grazing and mowing; upwards of 50 acres are in the heaviest white-oak, red-oak and hickory timber. The rock are Trap and Greenstone, the soil a dark clay loam, and of excellent quality. It has on it numerous Springs of the best water, and is of the best quality for Wheat, Tobacco and Grass, and is capable of being made a superior Farm.

Also, a Tract of 200 acres, lying two miles East of Lexington Depot, through which also runs a public road. This consists entirely of wood land, pine, oak and hickory. It is within a half a mile of a Saw Mill, on Abbott's creek, with an excellent road to the Saw Mill. The timber is of excellent quality and the soil a good sandy loam, will make a good Farm, and is considered of excellent quality for Tobacco. The prices asked for these lands, considering their convenient distance to a Railroad Depot, must offer great inducements to purchasers.

W. R. HOLT.

Lexington, N. C., August 1858. 8—4t.

PROSPECTUS

OF THE

# "North Carolina Planter."

The present is the tenth number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

Will they do it ?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication !

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ Postmasters and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

October, 1858.

NOVEMBER NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO

THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

**A. M. GORMAN, Publisher, Raleigh, N. C.**
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

## FOR ONLY $1.

ON the receipt of $1, will be mailed to any person a recipe of a remedy for Horses, while suffering with Botts or Grubs, which was never known to fail to give ease in their greatest agony, if given in time. Many valuable horses have been saved from an untimely death by this remedy, and if given as advised, and it fails, the money will be refunded. No person who has a horse should be without this recipe. Other remedies will be added, which will be conducive to health and thrift, and a great preventive of distemper, which horses are subject to. Address R. M. BROWN, the P. M. of New Hill P. O., Wake county, N. C.

March 2, 1857. 51–3m

---

## Read ! Read ! the following :

We the undersigned have used and known used the Receipt advertised by Robt. M. Brown, Esq. for the cure of Bots or Grubs in horses, and consider it the best remedy known, for that disease. Indeed, we have never known it fail giving relief in the very first instance, even when horses were suffering the severest agony. And the remedy is quick and effectual. For the benefit of every body, and especially for the benefit of that noble animal—the Horse—we recommend all to procure this valuable Receipt. We have known Mr. R. M. Brown's remedy to be used in very many instances, and never without effect. In some cases it has accomplished astonishing cures.

J. L. BENNETT, T. B. HOLLEMAN,
P. R. JONES, JOHN BENNETT,
EDWIN HOLLEMAN, of Wake County.
JOHN R. WARD, A. P. STROUD,
D. M. DURHAM, of Orange County, N. C.
JOHN C. BURGESS, WM. H. BURGESS.
Randolph County, N. C.

New Hill, Wake county, N. C., Sept. 1857.

---

## NORTH CAROLINA FORM-BOOK.

THIS day published by H. D. TURNER, a new and complete Edition of the NORTH-CAROLINA FORM-BOOK. Improved and greatly enlarged, containing three hundred and forty-four pages, Royal 12 mo., embracing many forms not found in former Editions. Printed on good paper, and substantially bound in Law calf. It contains "Forms" of all those Legal Instruments which people have occasion to use—and furnishing also a Guide to Justices of the Peace, Sheriffs, Clerks, Constables, Coroners, School Committees, &c., &c. Compiled from the best sources, being an improvement on all works of the kind formerly in use, and intended as a companion to "CANTWELL'S JUSTICE." To which are added the Constitution of North-Carolina and of the United States, an account of the principal Officers of the State and of the Counties, titles of Address, &c., &c. Furnished at the unparallelled low price of One Dollar, (being the cheapest book ever offered for sale.) When sent by mail, an extra charge of 19 cents will be required, to cover Postage. A liberal discount to those who buy to sell again.

Published and sold wholesale and retail, by H. D. Turner, at the North Carolina Book Store; and by J. B. Lippincott & Co., and Hayes & Zell, Philadelphia; and by A. S. Barnes & Co., New York.

Raleigh, April 17, 1853. 34—

---

## 500,000 No. 1. Fruit Trees for Sal

### WESTBROOK & MENDENHALL,

*Proprietors of the West Green Nurserie and Gardens near Greensboro', N. C.*

WOULD very respectfully call the attentio of the citizens of the Southern States t their very large stock of native and acclimate Fruit Trees for the Fall and Winter Trade bot wholesale and retail.

This large and handsome assortment has bee propagated from thrifty leaving trees and worke upon the best seedling stocks, which is a sur guarantee of fruitfulness and longevity, tw prominent characteristics which should not b overlooked by persons wishing to plant orchard either for marketing or family use. The stoc consists of the following trees :

150,000 Apple Trees.
100,000 Peach "
16,000 Pear "
12,000 Apricots "
10,000 Cherry "
12,000 Plum "
5,000 Nectarine "
1,000 Almond "
4,000 Grape-vines.

Besides, a very fine assortment of Currents, Strawberries, Raspberries, Gooseberries, etc., all of which will be sold on very reasonable terms for cash, or upon short time to punctual customers, who will be required to give a note on the delivery or reception of the trees at the place designated in the order, or they will be charged with interest from the date thereof.

All packages put up in superior style and a complete invoice sent to each patron and so arranged that the invoice will be the register of the orchard after the trees are transplanted, if they are planted in succession as each kind appears on the list.

September 1, 1858. 2—

---

## A. H. C. BROCKEN,

### 22 CLIFF STREET, NEW YORK.

MAUFACTURES OF

**GLASS SYRINGES, HOMŒOPATHIC VIALS, GRADUATED MEASURES, NURSING BOTTLES, ETC.**

Glass Ware for Chemists, Druggists, Perfumers, Photographs, etc. Green Glass Ware by the package. A liberal discount made to the trade. Orders from Country Druggists and Dealers solicited. Price Lists sent on application.

October, 1858. 10—3m.

---

## "THE SPIRIT OF THE AGE,"

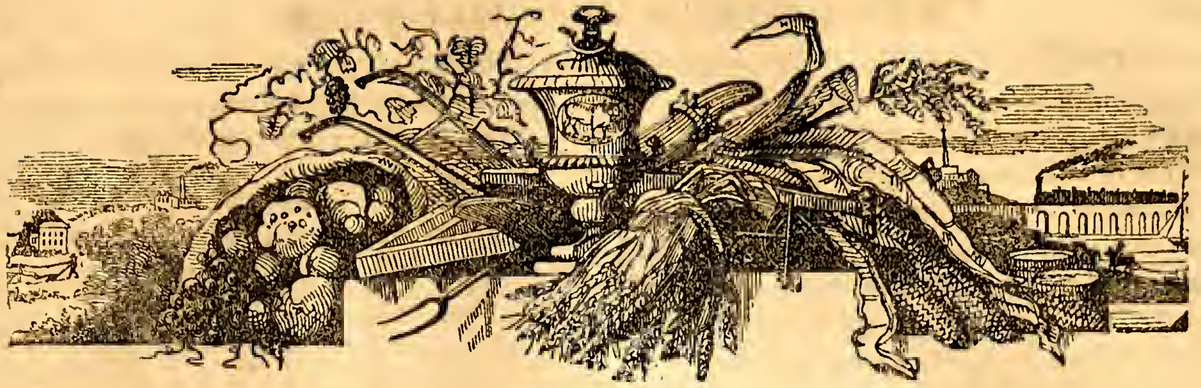
**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance.*



# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., NOVEMBER, 1858. NO. 11.

## Chinese Sugar Cane.

STRIPPING.—This operation is performed very quick by those accustomed to it. It is done with an instrument shaped much like a pruning hook, only it is larger, and is not sharp. A stroke downwards with this instrument, close to the stalk, strips off not only the pancle and blades, but also the sheath around the stalk at the base of each blade. If the instrument is sharp it does not clean the stalk so well, and besides that it would be likely to wound the stalk.

CUTTING.—This may be done as soon as the stripping is completed, but not until the mill and the kettles are all ready, as the cane should be ground as soon as it is cut, and the juice boiled as soon as it is expressed; otherwise the quality of the syrup made from it will be inferior, and it will be nearly impossible to make sugar from it at all.

There seems to be an impression abroad that frost will ruin the cane, and render efforts to produce syrup afterwards futile.—We think this an error, as Mr. John I. Marsh, of Washington, Ill., last year made both sugar and syrup from the Chinese Cane, late in October, long after heavy frosts had occurred. The full maturity of the cane is doubtless the most essential thing to be considered, and when this has beeen attained, it may be cut and kept until a hard freeze.

There is a culminating point in the development of the cane, which is the best time for sugar making. Mr. Lovering says, this point is attained when most, if not all the seeds are ripe, and after several frosts. Warm weather after freezing, injures both the juice and the sugar, and reduces both the quantity and quality.

TREATMENT OF THE JUICE.—In pressing the cane, there is considerable fibrous substance washed down with the juice, and therefore a number 24 seive should be placed immediately under the mill to prevent this from getting into the reservoir. When convenient, it is well to have the juice collected by a large funnel into a pipe of tin or lead leading under ground to the reservoir or tank, which, in this case may be conveniently placed near the clarifier. The greatest obstacle to success in this cane juice seems to be the superabundance of ficulence and acid which exist in it, therefore, the great importance of clarification. A moderate heat applied under the clarifier will coagulate and produce a thick scum; and then, by means of the pipe at the bottom the deficated juice may be carefully drawn off and the scum removed. In extensive operations more than one clarifier will be essential.—There is a difference of opinion as to whether it is better to apply the lime for clarifying to the juice before or after putting into the first boiler. Our experience, as yet, is too limited to determine. Lime should be used until the juice ceases to change the blue of litmus paper to a reddish hue. (Litmus paper may be had of any chemist.) In your test, dip one end of a narrow strip, and the effect is immediate. Be sure to use lime enough, as a slight excess is of less consequence than acidity. By the use of a Saccharometer (costing, perhaps, one dollar,) the relative richness of the juice in saccharine may be determined. According to the report of Mons. Vilmorin, of France, the juice which has not attained a density of 10.80 (Beaune) will not granulate well; but several experiments made by others on juice from immature canes, indicating no more than 6 and 8 deg. B., have partly crystalized. The density of the juice shows a rapid acceleration as the cane approaches maturity. The Saccharometer is also valuable in indicating the degree of richness to which the molasses should be cooked. This, when cooked, should be at 30 to 35 deg. B. In a full range there should be three or more boilers, each smaller than the other, with the one for finishing the sugar or molasses, the smallest, and directly over the fire—skim from this into the next, and from that into the large one—thence to the slop tub for the swine.—Dip the syrup, when done, into coolers, large enough to hold four charges from the boiler, and barrel in oak barrels, with pine heads. They must be well made and securely hooped.

*Southern Homestead.*

New Business.—Messrs. W. H. Oliver & Co., were purchasing quite a number of bushels of White Grapes, yesterday morning, to fill a northern order. We learn from them they were directed to purchase one hundred barrels, and put them up in any kind of liquor barrels, but Gin barrels, and add to each barrel of Grapes a few gallons of pure spirits. This may give some one a wrinkle.—*Daily Progress, Newbern, N. C.*

*From the Southern Farmer.*

## Ashes and Guano for Wheat.

Messrs. Editors:—As the time for the seeding of wheat is now at hand, or rapidly approaching, suffer me, through the columns of your most useful little paper, to state for the benefit of brother farmers, the result of my experience in wheat raising from the above combination of fertilizers.

When I came in possession of the farm on which I now reside, I found quite an accumulation of old ashes. I determined to use them in connexion with Peruvian Guano for wheat, at the rates of 100 lbs. each to the acre, which yielded near a fraction over 14 bushels to the acre, or to one seeded. Being so much pleased with this result, I determined to try it again last fall in the same way. The yield, though not so large as that of last year, ought to be satisfactory, when we take into consideration the loss consequent upon the depredations of bugs, rust, &c., combined. I have gotten sufficiently near through measuring up this crop, to satisfy me that the yield will be between 10 and 12 for one. It may be proper just here to remark, that I have used double the above quantity to the acre on portions of my fields, but am satisfied that the difference in the yield did not justify the extra expense; that is, if we leave out of the question the improvement of the land, and go in for the heaviest per centum on a given outlay.—Thus, you see, Messrs. Editors, that it is my impression (and that is founded on actual experience) that whilst a heavy application of guano leaves the land in decidedly a better condition, at the same time it does not pay so heavy a per cent. in dollars and cents as a lighter one does on the money thus invested. To be plain, 100 lbs of ashes and guano *each* to the acre, will make more wheat *in proportion*, than double that quantity will, yet will not benefit the land so much. But this is a digression; what I wanted to say is this, that from actual experiments I am satisfied that 200 pounds of old ashes and guano combined, will make nearly as much wheat as 200 pounds of guano, at any rate it will pay better. If this be true, does it not behoove every farmer to pay more attention to the accumulation of ashes, especially since

guano has become so exorbitantly high?—Let every farmer have an ash house. More anon.
JUNIUS.

Nottoway, Va., Sept. 24, 1858.

[The above is from a reliable source, and the experiment is well worthy of trial. The ashes, if caustic, will liberate the ammonia, and therefore leached ashes only should be used. With such mixtures we have heard of good results—indeed, they have been recommended on the highest authority; but an apprehension that the value of the guano would be impaired, has deterred many from making the trial.—Eds. So. Farmer.]

### Cotton Seed Oil—A Great Discovery.

The manufacture of oil from cotton seed has been carried on to some extent for several years, but the process of clarifying this oil so as to fit it for illuminating or lubricating purposes, has attracted the attention of those skilled in chemistry for a long time, but all attempts have failed up to within the last few months. The Cincinnati Price Current, however, says:

Mr. Davies, of this city, has, we have no doubt, at length solved the problem. A sample of this oil prepared by him has been in our possession the past week, and we having tested its illuminating properties thoroughly, feel no hesitation in saying that it gives a light far clearer and brighter than lard oil; does not crust or gum the wick, and is freer than any other oil from any disagreeable odor while burning. We regard Mr. Davies' discovery a most important one, the value of which cannot be well estimated in dollars or cents. We learn the process is at once cheap and simple, not increasing the cost but a trifle, as the article, when clarified, is sold at 90 cents per gallon. It will remain liquid at as low a temperature as the best sperm.

*From the Southern Planter.*

### The Curing of Tobacco with Charcoal.

The subjoined letter is furnished by a very skilful and experienced planter, at our request, for the benefit of all "green hands," (ourselves included) who are engaging in the cultivation of Tobacco. We have seen samples of several hogsheads, cured by this process, by our correspondent. They were very "bright," and yellow—what is more in their favor, they were sold for *high prices*.

We should like to be at liberty to publish our correspondent's name to his letter, but his modesty prevents us. Why is it that so many sensible men have such a dread of "seeing themselves in print?" This very nervousness of theirs is a serious obstacle to the progress of every agricultural journal in the United States. Many a good article which would be thankfully received by both editors and subscribers, is thus "kept back." Much information likely to prove valuable to large numbers of readers, is withheld; and, consequently, a great deal of good which might be accomplished by agricultural papers, is still undone. This is wrong. Farmers, as well as men of every other class, should *do all the good they can*. If a farmer is in possession of any information which he thinks would benefit his brethren, it is his duty to communicate it. Let every one act up to this advice, and errors will be annihilated—good feelings and strong sympathies will be engendered, and fostered among them; the cause of agriculture *will be advanced*, and we shall have added to our community of interests, many a real pleasure and social interchange of opinions. Allow us *to suggest the columns of the Planter* as a fitting vehicle for just such communications, and with great pleasure we add, one most agreeable to us. It is devoted to the interests of the farmer—therefore, let every farmer think he owes to the Planter, and to his brethren, an exposition of all that is valuable in his practice. Surely the men who so well know the value of information obtained at "the handle of the plough," and from *open air observation*, do not expect us to sit "up stairs," surrounded by "bricks and mortar"—the only view from our windows being the "sights" of a busy city—and *unaided*, to *instruct them*. We are accommodating in our disposition we know, but our face has not *brass* enough in it to allow us to promise any such thing. We intended to say this much at the first opportunity to all our readers. We hope they will, in return, say a great deal more to us. They have the odds.

Caswell County, N. C., Aug. 1858.

Dr. Williams:—*Dear Sir*—I have delayed complying with your request, that I should communicate with you on the subject of coal curing, or yellow tobacco, hoping that I might find some of my neighbors of more experience, to undertake the task. Like myself, they are reluctant to put on paper any plan on a subject so much under the control of circumstances. The most any one can do in the matter, will be to state general principles, leaving their application to the better judgement of those who may choose to try it. I will endeavor very briefly to do so.—In the first place, the curing barn must be made perfectly close, and no tobacco but that grown on fresh land, grey or sandy, or old field reclaimed after many years growth in pine, should be attempted, as that has more tendency to yellow on the ground, which greatly facilitates the desired end.—All plants to be used for one curing should be selected of a uniform color—cut the same day and housed as soon as practicable. If the tobacco is entirely of a green color, and consequently full of sap, let a moderate heat, about equal to summer-noon heat, say 90 degrees, be applied—fires made of decayed wood of any kind, such as can be pulled or knocked to pieces, and allowed to smoke freely, and regulated by a thermometer suspended in the centre of the barn, on or below the first tier. Continue this heat for 12 hours, then raise it 10° and in 12 hours 10° more, the next 12 hours 5° (115°) at this stage apply charcoal for 6 hours, by which time the tobacco will be through the process of fermentation, and as yellow as it will be. Then pass up to 120°, which in 12 hours will cure the leaf, after which go up 10° every 2 or 3 hours, until you reach 150-60, or any higher heat within bounds of safety from burning, and continue till the stem and stalk are cured. The coal need not be used longer than the curing of the leaf (say 18 hours) during the stages of 115-20°. It is of the utmost importance that the heat should not fall below the degree indicated at any stage of the process, otherwise the sap in the stem and stalk will descend into the leaf, staining or spotting, turning it red. Consequently the strictest watch must be kept, day and night. After the leaf is cured, any kind of dry wood, or half-dry, is better than coal throughout. If the tobacco is considerably yellow on the ground when cut, commence your fire with coal in the first instance, and with 100° of heat, and increase it every 6 hours five (5°) up to "120°," and 12 hours at that will cure the leaf, then go on as before stated. The advantage of the coal is, that it produces a dry heat, and is consequently best to fix or set the color. While the wood, even if seasoned, still has a steaming quality which makes it best for the fermenting or yellowing stage, and will not affect the color in the latter or high-heat stages. The great point is to get the tobacco sufficiently yellow, which will be, if at all, at the period when the fermentation ceases, and to commence the leaf-curing, just at that stage, or it will turn red, and a failure is the consequence. In this event, stop the fire, let the barn cool, take out the tobacco, and let it cure in the sun or remove to another barn, or shelter and dry without any more fire, and it will be more sightly than to continue the course first prescribed. The fate of the barn may be, and frequently is, decided the first 24 hours, and indeed in any stage, up to the curing of the leaf, and even then, if the heat is suffered to fall below 125-30° until the stem and stalk are cured. It is known to any one who has given attention to the subject, that tobacco, in its full perfection, must pass through the process of fermentation—this it will naturally do under almost any circumstances, and if artificially, it must be by the application of heat in regular gradation. A yellow color is the result in either case. To set the same, a dry curing heat must take it precisely at the period when the fermentation ceases, otherwise it will immediately begin to lose color by absorbing the sap from the stems, hence the difficulty in obtaining yellow tobacco. This can be done by any and every one with proper attention. And I will take this occasion to say that he who does it, will earn all the price the market affords. Nevertheless, let it be tried.

Yours truly, R. J. S.

*For the N. C. Planter.*

## Of the Functions which certain Elements in the Soil perform.

By Prof. E. Emmons, *State Geologist.*

(*Continued.*)

We have seen in a former article that certain complicated changes occur among the elements of a soil in consequence of the relations which these bodies hold to each other, especially those which exist between the different oxides of iron and organic matter.—It was proposed by the writer of that article, to show how much depends simply upon the state in which bodies exist in the soil, and that, though certain important elements may be entirely wanting, yet in consequence of the reactions which occur between the bodies in the soil, those *which are wanting*, may be supplied. For example, the nitrogenous compounds may not exist at all, as such in a subsoil, yet they may be formed by the mutual action of organic matter upon one of the oxides of iron, or rather the strong affinity which its protoxide has for oxygen. We stated that, although this affinity was strong, yet it does not take oxygen from a peroxide already formed in the soil, for if it did, the important results would be lost; but in consequence of its seeking the oxygen as it were in water, the working of the chemical machinery is such that a nitrogenous body is produced. Now this action is quite curious; for the instant that a particle of water is robbed of its oxygen, the hydrogen which is set free combines at once with the nitrogen of the air in the soil, and forms ammonia. But under other circumstances no such result takes place. No chemist can form ammonia by mixing nitrogen and hydrogen together; instead of combining, there is a repulsion of their particles, but when hydrogen is freshly liberated, it instantly seeks to combine with nitrogen in preference to all other elements. Chemists use the word *nascent*, or nascent state, in such cases, for this case does not stand alone. When first liberated it is in a nascent state, say they, and it will then combine, but if after the shortest possible period we can conceive, it does not combine, it loses its capability to combine spontaneously, and then it must be made to enter into combination by force, as that of electricity. Passing a spark of electricity repeatedly through a jar filled with the mixed gases, nitrogen and hydrogen, and they will combine, but never without force. This provision then, for the formation of ammonia in the soil, is extremely interesting. A result is secured just when and where it is wanted, one which is spontaneous and which arises from the specific state created by previous reactions. But iron is an important body aside from its chemical properties; it is an element necessary to health and well being. It colors the blood, and there is no doubt that in the blood in animals, and fluids in vegetables, reactions of a nature similar to those already described as occurring in the soil, take place also in the organisms of living bodies.

Iron is universally distributed. There is rarely, if ever, need of increasing it in the soil. There is more need by far of adding organic matter by which a greater amount of ammonia is acquired, or the flesh forming elements. The addition of animal fertilizers increases, it is true, the quantity of the flesh forming bodies in the most direct manner; but they also supply matter for the ready action of the oxides of iron.

It has been supposed that the husbandman was necessitated to step beyond his ordinary range of observation to see the harmonious workings of an over-ruling Providence; that all the beauties of nature were beyond the pale, or beyond the sphere in which he moved; that he must become an astronomer to see wisdom displayed. But are we not borne out in the opinion we have expressed, that in the soil, in which his work lies, there is wisdom of the highest order—an arrangement which we are called upon to admire? There is a combination of the necessary and useful; an adaptation of elements to each other, which secures to all organisms, high and low, a perpetuity of existence. Alter, or change one of the properties of these bodies, and the whole scheme would be deranged in its working. We may increase the power or force of the soil machinery, but we cannot change it, because it is exactly fitted for all the rest of the arrangements incident to this state of being. We are really obliged to increase the power of this machinery, for its capacity may not be equal to the requirements, when a numerous population has to be supplied with food. But man must work in the same range with nature, and the more perfectly her machinery is understood, the greater will be the success which will crown his efforts.

## Planting Evergreen Trees.

Every homestead should be more or less surrounded with evergreens; they give an air of perpetual Spring to the landscape, which is ever pleasing in the dreary days of winter; nor is this foliage less pleasing during the heat of summer, as the deep tints of their foliage, and the magnificence of their flowers contrast beautifully with the more sober tints of the deciduous plants and trees. It requires more care to take up and plant an evergreen than it does a deciduous tree; the roots should not be mutilated, nor should they be exposed for a moment, to the sun and air. If the tree is to be transplanted any distance, the roots should be kept moist with moss, and if it be possible, planted out during a rain. The Holly is generally considered a doubtful tree to transplant. Last winter we took up from the woods thirty or forty, during a hard rain, and planted them out during the rain. We have not lost one of them. If tthere was any loss of root in taking up, we cut back the head correspondingly. In taking up wildings, reference should be had to similarity of soils, where the tree is to be planted and where it originally stood. It is folly to take up a Magnolia from a swamp and plant it on a high dry hill. Evergreens may be planted until March.—*Cotton Planter and Soil.*

*From the Newberry Conservatist.*

## Restoring and Preserving Land.

(The following report was read before the Newberry (S. C.) Agricultural Society last year, and has never been published before. The Secretary handed it to us the other day, and we give it to our readers as one of the best, straightforward and simple essays on the subject we have seen.—Ed. Con.)

Can it be done? That land can be preserved in constant cultivation for any length of time there can be no doubt; some of the oldest countries in the world being the richest. But can our lands in Newberry District be preserved in their native fertility, or restored when exhausted, and are they worth the trouble and expense of doing it? If we find that they are doomed to grow poorer with every crop which is taken from them, without a hope of recovery, or if we find that their preservation or restoration will cost us more than they are worth, why then our Society is engaged in a vain pursuit, and we should disband it, abandon the homes of our affections, and seek a more favorable land in the fertile regions of the far West. But gentlemen, your committee rejoice in the belief that there is still hope for our old country, and that our interest will not require us to leave it, but that our lands which are yet good, may be preserved; and that those which have been exhausted may be reclaimed; and we have been led to this conclusion from experience, which we consider the only competent evidence in this case. One at least of your committee (feeling a deep interest in the subject, and knowing that our agricultural prosperity depended upon the solution of this question) has for the last 15 years adopted a series of experiments in planting, with a view to ascertaining whether the thing was possible, and he is happy in being able to state that he has succeeded, not only in preserving such portions of his lands as were good at that time, but in improving those which had been injured by a bad system of cultivation. The plan which has been tried and which we recommend, we will briefly state:

The first object is to prevent the land from washing, if broken or rolling, as most of our District is, which must be done by hillside ditching and horizontal plowing, the directions for which we hav'nt space to give, but which you find in any of the agricultural papers. But one thing we would urge; not use ditches, except where they are indispensable to prevent a break. Next, manuring, the subsoiling, and the most important of all, a proper rotation of crops. But we will explain more fully. The manure used is compost and cotton seed, the first on the corn crop, and the latter on wheat and oats. The compost is made in two ways; 1st, the old fashioned way of littering the stock yards with leaves or straw, or any other vegetable matter, and after being sufficiently tramped and mixed with animal manure, put into pens to ferment. This is an inferior plan, and injures stock if allowed to stand on the lots in bad weather; but a large quantity can be made in this way, and should be applied to fields nearest the lots. But for the more distant parts of the plantation, the manure should be hauled dry and fresh from the stables, and composted with leaves and mould near where it is to be used. It should be put up in square rail pens 10 or 12 rails high. The stable manure well mixed with leaves and mould, which should be wet, one wagon body full of stable manure to each pen. If those two pens should not make manure enough for the whole corn crop in the hill, then use guano for composting;—150 pounds will be sufficient for one pen, such as above named, mix and put up the same. Go on making until you have enough for every hill of upland corn you intend to plant. The manure should be made in August, immediately after the crops are laid by, otherwise it will not be fit for use the next spring. The manure should be put into the drill three feet apart, a double handful in each place, the rows being 4½ feet wide, and the corn dropped on the manure, the hand pressing it with his foot in passing, and all to be covered with a scooter furrow, on each side throwing a bold ridge on it, to be boarded off if necessary. The subsoil plow is to be run as deep as possible in the shovel furrow, with which the land is laid off; and after the corn comes up to be run in the scooter furrow, which covers the corn, so that you have three deep furrows immediately under the corn as a reservoir for water in dry weather. It would certainly be better to subsoil the land entirely, but we only recommend what we have tried, and found to answer the purpose very well. We use the Broyls' subsoil plow, preferring it to all others, on account of simplicity, cheapness and efficiency. The rotation which we have tried, and which we recommend is; 1st, corn with manure as above stated, together with peas between every hill of corn; 2d, wheat or oats manured with cotton seed or guano; 3d, cotton, which you cannot manure, the land having been manured the two years previous will yield a fair crop with it. We would recommend a year's rest after the small grain crop, but have not had sufficient open land to try it. We do not consider the mode which we propose by any means perfect, for we have said nothing of lime or marl or green crops, which many consider the most practicable means of restoring our lands, but we hope that we have said enough to demonstrate the possibility of redeeming our homes from the desolation which has been predicted by our enemies and some of our desponding friends. But is our country worth preserving? Without alluding to the fond associations which bind us to the place of our nativity, we will only mention a few of the advantages which our country possesses with a view of convincing you that your interest requires you to improve and not abandon it.

In point of location it has advantages unsurpassed by any other country, lying convenient to the Atlantic Ocean and consequently to the markets of the world. We are exempt from the heavy taxes for freight which interior and remote countries are compelled to pay, both on their exports and imports, which would be sufficient, if applied to the improvement of our lands to make them as rich as the valley of the Mississippi. Next, our climate is everything which we could desire, being just warm enough to grow all the cereals to perfection, enabling us to produce all the necessaries and most of the luxuries of life. Then our geological formation is such, as not only to produce the most fertile soil but to supply us with the greatest abundance of the purest and best water. Let us then cease our ruinous manner of culture and adopt a course calculated to preserve and restore our lands, which we have endeavored to show was practicable.—Then will our country become what nature designed it to be, one of the most desirable under the sun.

JOHN N. HERNDON, Ch'n.

---

PEABODY'S PROLIFIC CORN.—We have never seen so fine a specimen of Corn, as was shown to us this morning. It was the product of a *single* grain of the variety called "Peabody's Prolific," and was grown on the plantation of James Moore, Esq, in Brunswick county. It contained four distinct stalks and bore *ten* full ears of Corn, and a nubbin besides. We are told that this is not an isolated specimen, but a fair sample of the whole field. In addition, the yield of fodder was said to have been immense.

*Wil. Herald.*

## Cleaning Seed Wheat.

John Johnson, of Geneva, one of the most thorough and successful farmers in this country, as all our readers know, says that he quit raising chess *twenty-eight* years ago—by never sowing it. He has not raised a bushel of it in all that long period on his extensive wheat farm. Thirty-seven years ago, he obtained eight bushels of chess in every hundred of wheat. His mode of cleaning seed is the same in substance that we have practiced thirty years ago, but will bear repetition, and we therefore give it as recently described by him:

My plan is to take out the fanning-mill riddles, some call them screens; I call the lower one only a screen—it takes out mustard seed and cockle *in part*. After the riddles are out, take off the shaking rod, or at least the one nearest the wings or fans; then let one man turn the wings or fans by the crank or handle, as usual; let another pour the wheat into the hopper from a basket or any other vessel—a tin pail answers very well—let him pour the wheat in regularly and not very fast, if much chess. Let the man turning keep up a steady wind; he need not turn very fast. Have a boy, or a girl, or a man, or a woman, if you choose, to take back the clean wheat as it comes down from the mill, and I will guarantee that every chess seed will be blown out. The man pouring in the wheat ought to be the *boss*, to make sure that the man turning does not slack up too much, or that he don't stop turning until the wheat and chess are all out of the hopper, else it may fall down among the clean wheat. If the wheat is 60 lbs. to the bushel or over, very little, if any, will be blown out with the chess. As considerable will lay on the cockle and mustard screen, when that is going to be put down it is the safest to scrape back the upper part with the hand, because if there is chess anywhere among the wheat, it will be there. Now, if this is done precisely as I direct, and if the wheat is not made entirely free of chess, unless three chess seeds should be sticking together, which is sometimes the case with the top seeds on the main stalk, in that case there may be such left in the wheat, still a little more wind will blow them out. If any man will try it and cannot do it, send for me, and if I cannot do it to perfection, I won't ask them to pay my traveling expenses.

We have met with many farmers who asserted that they sowed perfectly clean seed, and yet had an abundance of chess—but on closely examining such seed, spreading it out thinly, we could always find plenty of the seeds of chess; sometimes enough to make ten thousand grains in a bushel, and yet pass entirely unnoticed by a casual observer. Traveling once with a friend who "believed in chess," we offered to prove to him that all seed claimed as clean, was foul, and proposed to examine the seed we should find at the residence of a good farmer we were about to call on. The wheat was accordingly called for and closely examined—handful after handful, but no chess could be found! "What," said we at last in despair, "do you never raise any chess here? I do not find any." "No," was the emphatic answer, "no chess grows on this farm!—We never sow any—we have cleaned the farm of such foul stuff long ago—and we find it never grows unless it is sown."

[We find the above in one of our exchanges without credit, though we believe it is from the *Country Gentleman*. From our own experience, we can commend it as containing all the directions that are necessary for getting rid of cheat. By sowing *clean* seed for a few years, not a vestige of chess will be left.—Eds. So. Farmer.]

---

Fruits from the Crimea.—New apples of extraordinary excellence have been discovered in the Crimea, which will, no doubt, find their way to Europe and America.—Pallas speaks of one called the Sinup Alma, which keeps till July, and only acquires its excellence before the new year. Wagon loads are annually sent to Moscow, and even to St. Petersburg. There is also an autumn apple, thought to be far the best ever tasted in any country. A larger cobnut than heretofore known, is also recorded. Twenty-four varieties of grapes are cultivated, either for wine or the table. None of them appear to be of importance.

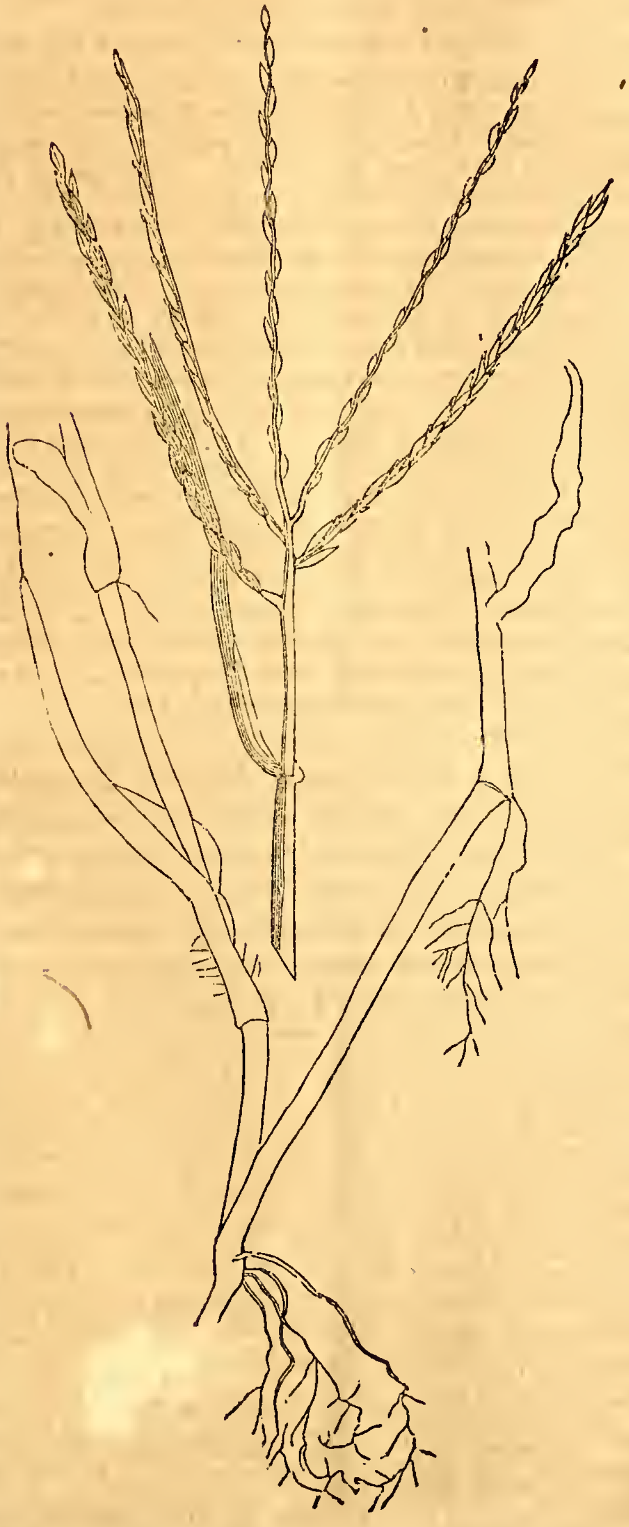
*Edinburgh Phil. Journal.*

*For the N. C. Planter.*

## The Grasses and their Functions.

BY PROF. E. EMMONS.

PANICUM SANGUINATE.—*Common Crab Grass—Finger Grass.*



The common crab grass belongs to a family of grasses in which the species are extremely numerous. They constitute a large proportion of the tribe *panicae*, whose inferior flowers are incomplete, with two unequal glumes, and the lower flowers being usually staminiferous, or bearing only stamens. Darby, in his Southern Botany has described thirty nine species as common to the Southern States alone. It is a family, however, which contains but a few valuable species, or those which may be profitably cultivated for fodder.

The common crab grass, figured in the margin, has a procumbent, assurgent, geniculate stem, which root at the joints; the leaves are hairy, with spikes shorter than the joints, and both digitate, spreading, and from four to six in number. It is an annual, and grows through the summer, or indeed until frost. It is very common in most cultivated fields, and is a troublesome weed in gardens.

This grass, though by no means so valuable as the orchard grass, or red top, is still to be regarded as worthy of some attention, as it grows here luxuriantly, and is at least moderately nutritious. Cattle, horses and mules, eat it with considerable avidity, and it should be saved for fodder. As usually obtained for this purpose, being pulled by the hand from corn-fields, or if mowed in such grounds, it is apt to be foul with sand and dirt, in consequence of which its value is greatly diminished. It however, cannot take the place of the better grasses, though it grows well—or at least, should not.—It grows from one to two feet in waste places, and in gardens and corn-fields it springs up vigorously after the crops have been removed.

Another species of panicum, P. crus-galli, is a very common grass about barns and fences, where the soil is rich. Some attempts have been made to cultivate it, as it is found to be nutritious. Its seeds are large and triangular, and contain a large proportion of farinaceous matter, equal in nutriment to the buckwheat. It is relished by stock of all kinds, and there is no difficulty attending its cultivation. It grows sometimes four feet high, though usually not more than two or two and a half. It is better than the crab grass, and contains more nutriment. Its ash is composed of:

| | |
|---|---|
| Silica, | 17.325 |
| Phosphate of iron, | 0.425 |
| " lime, | 0.625 |
| " magnesia, | 2.831 |
| Phosphoric acid, | 6.895 |
| Silicic acid, | 0.625 |
| Carb. lime, | 3.060 |
| Magnesia, | 2.268 |
| Potash, | 36.656 |
| Soda, | 1.885 |
| Chloride of sodium, | 5.723 |
| Sulphuric acid, | 8.524 |
| Coal (unburned,) | 1.830 |

One hundred parts of the plant nearly dry, gave:

| | |
|---|---|
| Water, | 4.787 |
| Dry matter, | 95.263 |
| Ash, | 11.479 |

Amount of inorganic elements in a ton of hay, 235 pounds, the proportions of which are represented in the above analysis of the ash.

*For the N. C. Planter.*

Mr. Editor:—*Dear Sir*—We wrote an article for your journal, which was published in its August issue, in which we attempted to define and explain what we shall call our *frosto thermal* line, which line we placed at 300 feet vertical height above our mountain valleys, at which point frost suddenly ceases, and the thermal strata with its genial influences as abruptly begins. The reasons for troubling you with these communications are these: Various individuals having recently applied to us in regard to our opinion of the thermal strata being uniform in its manifestations in different years, we here avail ourself, through the medium of your journal, to answer, as well as we can, all inquiries directed to us on the subject. The thermal strata commencing suddenly upon a horizontal line at the height of 300 feet, preserves the most tender plants by means of its genial influence until reaching the height of about 600 feet, from which point it seems to gradually fade out, in its upward progress, and at 900 feet leaves no trace of its presence on vegetation whatsoever.

We can say positively, that the vernal region lying above the frost line has been regular and uniform in its manifestations for the last twenty-five years, and that within its warm embrace, all kinds of fruit trees, during that time, never failed of their fruit from frost.

It has been communicated to us that in the open champaign country east of the mountains, that the thermal strata does not lie so high as amongst our mountain valleys that in fact, it ranges so low that many of the higher swells of the plains lift their heads into it. We will here say, that the owners of the lands in such localities are possessed of property possessing an intrinsic value that they are little aware of; and were we prone to speculation, our first operation would be an attempt to purchase these elevated points which rise into thermal strata. Near a railroad line they will possess an invaluable value.

S. McDOWELL.

Franklin, Macon county, N. C., Sept. 18.

## Cotton Seed.

You are now ginning, and your cotton seed intended for manure, should be kept from the weather and under cover. In no item of the same value does the plantation lose so much, as in its cotton seed intended for manure, which are thrown out in heaps against the side of the gin house, to lie through the winter, decaying and exposed to the sun, wind and rain. In this condition, a heap of cotton seed loses 30 to 50 per cent. of its value by the middle of February. We shall call attention to this subject again in our article of work for January, when we shall go fully into the subject of applying cotton seed as a manure for both corn and cotton, in their unrotted state. This may, to many persons, appear paradoxical at first view, as nothing is properly food for plants in its undecayed condition, yet our experience of several years has proved conclusively that such is the solubility of cotton seed, that put into the ground in January or February, they furnish food for the young plant, either corn or cotton as soon as it is up. In this way none of the valuable gases are lost by evaporation, etc., as in the case of rotting the seed in bulk.

*Cotton Planter and Soil.*

*From the Cotton Planter and Soil.*

## Apples—How to Plant Seeds, Raise Stocks, &c.

Dr. Cloud:—*Dear Sir*—It is best that apple seed should never get very dry after gathering until planted.

There are two ways of planting—both are good, one is to prepare the land and plant on rather low beds in the fall, they should be covered shallow, and will be up early in the spring, and make a good growth.

The other plan is to put the seed in a box and bury it out in the garden, or anywhere, five or six inches deep, take up very early in the spring or latter part of the winter, and plant. In this way the seed sometimes sprout considerably, but even then, carefully handled, they come and do well.

Distance.—Drop the seed about one inch apart, and when they first come up if skips occur, take up where they stand thick and re-plant where too thin. Cultivate very much as you do cotton, only you do not cut out the young plants with the hoe. A little trouble will enable your correspondent to tell how much seed he wants, by calculation.

### CATAWBA GRAPE VINEYARD.

Say to Mr. S. H. A. he need not be at any great expense either for vines or vine dresser, if his land is rich and mellow enough to bring good Indian corn, and he can obtain the services of a *Sambo* to lay off straight rows with a scooter or shovel, and to dig the holes for his vines or cuttings.

Check the ground 6 x 10 feet, dig a good big hole where the rows cross—plant two cuttings or one vine. The hole should be filled with rich surface-soil. Drive a stake by each vine to tie up the young vines. In planting cuttings, only one bud should be left above ground, and only one shoot allowed to grow the first and second year.

I suppose the cost would be for one year old vines 25 cents each; cuttings $1 per hundred; labor nominal.

The late frost, 26th April, was very severe on our grapes. The Catawba and Isabella do well here.

### VEMMIN ON HOGS AND FOWLS.

Tell Mr. W. D. H. to mix some tar, lard, and ground sulphur together, and rub his hogs all over with the mixture, say about equal proportions. The same for fowls leaving out the tar—rub it under the wings.

### COTTON SCRAPER.

We were suprised not a little, when we read in your "Plantation Work for May," on the topic of Cotton, that you did not use the Cotton Scraper, but mostly relied on the hoe, living as you do in the heart of cottondom. In this section, where the plant is so difficult to bring to maturity and make a good crop, our genius is taxed to the utmost to obtain the implement that will most readily protect the slow growing crop from the ravages of the swift growing crab grass, and the vigorous bur; it may be different with you, it no doubt is. We use here several kinds of scrapers, all, though, do pretty much the same work. The one known as the big helve scraper is mostly used just around here. When the cotton is up to a stand, this scraper is used to precede the hoe, it is so stocked as that the blade takes off the side of the ridge in a kind of slicing way, leaving the cotton on the pinacle of the ridge, in a space from one to two inches wide, leaving the hoes but little to do but to bunch out the cotton, (unless very foul with grass.)—This scraper also cleans the middle of the row by covering all grass or small weeds, leaves the ridge unbroken, smooth and shining—works well on any kind of ridge that is well raised.

### THEN COMES THE BROAD SHOVEL,

Which is so made as to push up the loose dirt to the young plants. This is done with such precision, the plants, though very small, have the dirt thrown around them, covering the small grass without covering the cotton. This implement also cleans the middle, leaving a small ridge of loose dirt there. This shovel is 15 to 20 inches wide at top, and not deeper than the common shovel; it is preferred to the turn plow, which covers up small cotton, whilst the little shovel does not clean the middle of the row. Thus much from Yours, truly, Box 59.

Brownsville, Tenn., 1858.

We are greatly obliged to our correspondent from Brownsville, Tenn., for the above excellent article—inquiries, answers, &c.—In this article our readers have something practical. Planting our cotton seed *exactly* where we wish the *stalk to stand*, we have had very little use for scrapers to run around drills to expedite *chapping out*, (*odious!*) We have never esteemed grass an enemy, in our agricultural practice—we find no difficulty in keeping it back till our cotton has gotten possession of the land, and after we are done plowing or sweeping, (to keep the surface pulverized) we are are gratified to see the grass cover the surface of our fields.—Ed.

## Agricultural Schools.

In some portions of our State, public attention seems turned towards the subject of Military Schools. Although an advocate of such institutions as the most successful, yet tried in our country for the thorough discipline and full development of both the mental and physical powers of our youth, there is another class of schools for which we would solicit the consideration of those interested in the subject. We refer to Agricultural Schools, which might be made as fully scientific as, and far more advantageous to the majority of our youth, than Military Schools. There is, however, room, and there would be pupils, and, for aught we know, there may be enterprise sufficient in our State for the establisment of both. But if both cannot be established, let us have the Agricultural by all means.

Ours is pre-eminently an Agricultural country. For every commissioned officer in our army, there are hundreds, perhaps thousands of commanders over those who struggle with the Mother Earth, to induce her to yield up her products for the sustenance of mankind, and ignorant commanders they are. With but very few exceptions, the farmers of to-day will compare about as favorably with those of a quarter of a century hence, as the Chinese military officers do with the graduates of West Point.

While Law and Medicine, and some other sciences, have their colleges and their schools, their professors and their disciples, Agriculture—the noblest of them all—is scarcely recognized among them, the general opinion prevailing that "any one can manage a farm" who is gifted with what the world terms common sense.

Agriculture *is* a science. The fact has been ascertained and established by scientific men. As a science it is yet in its infancy; but the time will come, perhaps shortly, when some of the practices of those empirics, now considered model farmers, will be discarded as pernicious to the soil and the result of ignorance.

Some of our most successful farmers contend that theoretic farming will not do.—Why will it not do? Simply because the theory is false! If the theory be correct, practice will most undoubtedly verify it.—Prejudice against "book farming" is engendered in some such manner as the following: A farmer takes up his agricultural paper and reads the gratifying result of the application of a specific fertilizer and concludes to try it. The result of his experiment may be altogether unsatisfactory, whereupon he orders the discontinuance of his paper, and comes down on scientific farming, "like a thousand of brick." The reason of his failure is probably because the nature of his soil differed materially from that referred to in the "book article," and it may be, already possessed a super-abundance of the specific which he applied.

We want, we must have, in a few years will have Agricultural Schools, where our young men can learn to analize soil, tell their ailments, prescribe with certainty for their treatment, and cause many blades of grass to grow where none grew before. Why not begin now? Why not let the "Good Old North State" equal if not surpass her sisters in the advancement of one department of science? Will not our legislators consider the subject at the coming session, and establish a State institution for the promotion of agricultural science? Some may think the Chair of Agricultural Chemistry at our University sufficient, but it is not; we want a school where the practice as well as the theory of Agriculture may be taught, where theory can be verified by practice, and where the results of that practice may be scattered among the farming community throughout our State.

If our legislature shall ignore the subject, then we call upon the State Agricultural Society, and the similar societies in the different counties, particularly that of Cumberland, to consider the matter and establish such schools as will sooner or later grace more than one county in our State.

*Fayetteville Carolinian.*

*For the N. C. Planter.*

## Descriptive Catalogue of Peaches, that have been tested by experience previous to and during the year 1858.

By JOSHUA LINDLEY,
Pomologist & Nurseryman.
New Garden, Guilford Co., N. C.
(*Continued.*)

19. Red Magdalen.—This tree grows thrifty, has serrated leaves and small flowers. The fruit is rather larger, and of a deeper red color, and rather finer quality than Red Rare Ripe. The tree is also of a more thrifty growth, with deeper green foliage. It is a great bearer, and ripens at the end of July.

20. Large Early York.—This tree is of the most thrifty growth, with globose glands and small flowers. The fruit is rather large, color, mostly red or a pale greenish white ground. The flesh is rich, juicy, sweet, vinous and excellent. The tree is very productive, and is highly worthy of extensive cultivation. Ripe toward the end of July.

21. Stout's Rare Ripe.—This tree grows thrifty, with serrated leaves and small flowers. The fruit is rather large, round, of a red color, or a pale yellowish white ground. The flesh is rich, juicy and very good, and ripens at the end of July.

22. Bergen's Yellow.—This tree grows moderately thrifty, with reniform glands and small flowers. The fruit is rather large, roundish oval, yellow, with a red cheek; flesh rich, juicy and fine, and the fruit ripens the last of July.

23. White Imperial.—A beautiful white fruit, touched off with red on the sunny side. It is of rather large size, nearly round. The tree is quite thrifty; has globose glands and small flowers, and the fruit is sweet, juicy and fine, and ripens toward the end of July.

24. George 4th.—This is a tree of the most thrifty growth, with globose glands and small flowers, and is one of the best and most regular bearers. The fruit is rather large, of nearly a round form; color a pale yellowish white, with a red cheek; flesh very rich, juicy, sweet, fine flavored and excellent; being equalled by few, and surpassed by none, and is highly worthy of extensive cultivation. Ripe from the 15th to the end of July.

25. Bellegarde.—This is a fruit of the finest quality, and the tree is thrifty and productive. The fruit is rather large, nearly round, of a rather dark red on the sun side, with paler marbled red on the other. It is rich, juicy, fine flavored and excellent, being scarcely surpassed by any other peach. It has globose glands and small flowers, and ripens at the end of July.

26. Montaubon (Double Mountain.)—This is a fruit of the finest quality, being of medium size, round form, of a greenish white color, touched off with a little red next the sun; flesh rich, juicy and fine. It has serrate leaves and large flowers, grows thrifty, bears well, and ripens at the end of July.

27. Early Cooledge.—This is a tree of thrifty growth, with globose glands and small flowers. The fruit is of medium size, round, greenish white, with a red cheek. It is a fruit of good quality, and is a great bearer, but is rather acid, with lack of richness and flavor. I may not have the true kind. Ripe at the end of July.

## Dickson's New Patent Plow.

The new patent plow of Mr. Alexander Dickson, of Orange, which we have seen, is simple in its construction, and seems well adapted to the purposes designed. It can be used as a surface plow alone, and then by a simple contrivance, a subsoil attachment can be made and set to any depth. It can thus be made to do the work of a surface and subsoil plow at the same time, thus saving the labor of one hand. We need not at this day enforce the importance of deep plowing, for every farmer knows by experience the benefits resulting from it, though it should be done in such a way as to leave the soil and clay in their proper places. This it is insisted is effected, and thoroughly effected by this new patent. The subsoil attachment can be taken from the plow, put to a simple wood work, and used as a subsoil plow or coulter, for all purposes for which such implement are used on a farm.—*Standard.*

## Wheat.

The period for seeding this most important crop has again rolled around. We have often called the attention of our planting friends to the importance and economy of raising their own wheat at home, here at the South. There is no crop more certain, or that pays a better per cent. on the land and labor necessary to grow it. We are to be understood then to say that it is a certain and remunerating crop properly managed. This we assert from personal experience, and our successful experience and assertion of the fact, we predicate upon the following essential conditions: Deep plowing in the preparation of the land, thorough manuring and early sowing. In this way, twenty to thirty bushels per acre may be as certainly expected from our land as a fair yield of cotton. The planter that is satisfied with seven to ten bushels per acre, will very soon lose his seed; and, like the planter, who plants cotton for from three to five hundred pounds per acre, in continued disappointment, laments the uncertain and unfavorable seasons, and rails out upon the unfavorable climate. Three to five acres will produce an ample supply of wheat for almost any family in the country. This may be well prepared, when the produce will be from sixty to one hundred bushels. The true cause of failure in wheat raising among cotton planters, consists mainly in sowing twenty to forty acres on corn stubble annually, and that late in November or first of December, and plow in with plows worn out in cultivating the cotton crop! Let every planter who can, commence now and prepare by deep and thorough plowing, some three to five acres, then spread on it 500 bushels per acre of good compost manure, and then, if you have no harrow, prepare your seed wheat, a good variety, by brining either with salt or bluestone, and drying with lime or plaster of Paris, sow the seed, one to one and a half bushels per acre, and plow in with a scooter, after which brush it over evenly. A good harrow supercedes the necessity of the scooter plowing and brushing.

*Cotton Planter and Soil.*

## Winter Oats.

*Editors Southern Cultivators:*—I am not one of those who are accustomed to writing for the sake of seeing my name in print, and am an earnest hater of humbugs and humbugers. Being a planter myself and feeling a deep interest in the success of this noble calling, I feel it my duty to call the notice of the planting public to a new variety of Winter Oats which has been introduced in our neigborhood recently. They are a large white oat, growing from six inches to one foot taller than the common varieties, and the head correspondingly heavy. They can be sown either in the fall or spring, and produce from one half to as much again as any other kind I can sow. When sowed in the fall, half a stand will make more than a good stand of other kinds. I have the Black Egyptian Oat and several kinds of spring oats, and I think I speak advisedly in what I have said. I shall throw away every other kind, and so every one who has sowed them in this neighborhood informs me they will do. I have a bunch grown from one root which has one hundred and seventy-one stems. It is worthy of remark that they are the only oats that have *escaped the rust* this season. I have them sowed both in the winter and spring—both escaped the rust; and while others who have sowed the common varieties of oats have made almost an entire failure, I have an unusually fine crop of this kind.

We call them here the Jones Oat, from the fact that they were introduced into this neignborhood by a Mr. Stephen Jones, from Virginia. I will supply any who may desire to make a trial of them for the next season at one dollar a bushel. When sacked up and sent to the railroad the purchaser must pay me for sacks, freight, &c., extra. I can supply to the extent of several hundred bushels, and am engaging them rapidly in my own neighborhood where they are known. They should bo sowed to make the heaviest yield about October or November in this climate—one bushel to the acre. If you think this worth a publication, put it in the next number of the Cultivator, and oblige,

Yours truly,

P. W. HUTCHINSON, Jr.

Watkinsville, Ga., July, 1858.

## Mr. Morgan's New Patent Tanning Process.

We are gratified to know that the tanning discovery of Mr. Jesse Morgan, of this place, for which he some time since secured a patent, is favorably received and highly prized wherever it has been introduced. It is regarded as being among the most important improvements of the day. The following, going to establish this assumption, is taken from the last Marion Star.—*Yorkville Chron.*

Mr. Editor:—I wish to give the readers of the Marion Star my experience in tanning leather, as I think it will be of benefit to them.

I have been trying for the last twenty years to tan leather for my own use, and have nearly always failed; the leather would either be half tanned or almost rotten. This year I had some 12 large sides in tan. On examining them, a few days ago, I found that they were to share the fate of the former.—I related the circumstance to the Rev. F. M. Morgan, who informed me that they could be tanned in twelve hours by a certain patented process, the right of which he was authorized to sell. I bought the right and went to work, and before the sun set I had twelve large sides of as well tanned leather as I could desire. I think that all farmers who tan their own leather (or try) would do well to procure the right from Mr. Morgan while he is here among us. The material for making the composition to tan twelve sides cost me forty cents.

D. GILCHRIST.

Gilchrist's Bridge, S. C.

## Fattening Hogs and their Manure.

To give hogs a start, when first put up for fattening, there is in my opinion no better food than good ripe pumpkins, boiled and steamed with a moiety of potatoes, and the whole well seasoned with meal scalded in and mixed with milk. There is a sweetness in the boiled pumpkin which is very attractive to his pigship. Indeed all the trouble with this kind of food is, that it is difficult to get enough to supply their wants. The writer has fed to a pen of 20, two kettles, of 60 gallons, per day, for some two weeks. I think to commence on this even preferable to hard corn.

While upon this subject, allow me just to suggest how large an amount of good fertilizing matter is usually thrown away in feeding our pork. The common course is to have an enclosed pen for the swine to eat and sleep in, and all the manure made usually goes into an uncovered back yard—probably a real mud hole, where the manure made from feeding a large quantity of grain, is allowed to go to be leached and evaporated by the rains and sun; and when we come to get out this valuable compound the next season, to apply to our soil, we find it like the Irishman's flea—not there. Now we all talk about the value of swine's manure, and with truth, for it is supposed to be more fertilizing than that of any other animal. This being so, why not endeavor to save it, and not actually throw it away in the manner described? If no better remedy presents, just make a temporary cover to the hogyard, of rough boards, or anything that will keep out water, and just supply the pigs with plenty of material to work up—muck, turf, straw, weeds, leaves, or indeed almost anything of a decaying vegetable nature, and the thing is done—when perchance the next season you will find that instead of five loads of leached manure, you will find just four times the amount, and a little better article at that.

*Country Gentleman.*

Important Hints in Washing Clothes.—The American Agriculturist asserts that the great secret of the success of nine out of ten of the washing fluids, mixtures and machines which have been sold over the country for many years past, is not owing so much to the inherent qualities of the articles themselves, as to the process of soaking, which they invariably recommend. If people pursuing the old-fashioned system of washing, will simply take the precaution to throw all the clothing to be washed into water ten or fifteen hours before beginning operations, they will find half the labor of rubbing and pounding saved in most cases. Water is, of itself, a great solvent, even of the oily materials that collect upon clothing worn in contact with the body, but time is required to affect the solution. Every one is aware of the effect of keeping the hands or feet moist for a few hours—the entire external coating of secretion is dissolved. The same effect is produced by soaking for a few hours, clothes soiled by the excretory matter of the skin.

Sorgho Syrup.—A very large amount of this article will be made in Buncombe the present season. W. W. McDowell, Esq., near this place, had seven acres in cane, and is confident of making two thousand gallons of excellent syrup. N. W. Woodfin, Esq., has, we learn, some fifteen or twenty acres in cane, and almost every farmer has more or less of it. Extensive preparations have been made for grinding and boiling, and the work is now going on briskly.

There can be no doubt whatever that this section is thoroughly adapted to the cultivation of the Chinese Sugar Cane; and as little doubt that it is destined to become a leading and very profitable crop. The matter was fully tested last year, and is no longer an experiment. Many thousand gallons of the syrup will be made in Buncombe this year. Western North Carolina is to be a land literally "flowing with milk and honey."

## Cotton.

We compile from the New York Shipping and Commercial List a statement of the number of bales of Cotton received at the principal shipping ports for the year 1857'–8.—The total receipts of Cotton at all the shipping ports for the year just ended, were 3,113,962 bales, showing an increase of 174,443 bales as compared with the previous year. Of these 23,999 bales were from North Carolina, which is a considerable falling off as compared with the receipts of the three previous years. Included in the total receipts there were received overland, from Memphis, Nashville, &c., 3,363 bales at New York, 3,275 bales at Philadelphia, and 2,986 bales at Baltimore.

The total exports from the United States to foreign ports, for the year ending August 21, 1858, were 2,598,455 bales, as follows: To Great Brittain 1,809,966; France 384,002; North of Europe 215,145; and to other foreign ports 181,342.

The great increase of shipments, it will be seen, has been to Great Britain, while there has been a falling off in the exports to France and the North of Continental Europe.

The following will show the stock of cotton (in bales) on hand at the different ports of the United States on the first of September, 1858: New Orleans 30,230; Mobile 10,495; Florida 80; Texas 1,899; Savannah and Augusta 12,585; Charleston 11,915; Virginia 600; New York 25,000, and other Northern ports 20,322. Total number of bales 102,926. The total number of bales consumed in the Northern and Western States is reached by deducting the exports and stock on hand from the receipts, and the amount thus obtained for the last year was 452,185 bales. To this should be added at least 150,000 bales for the consumption in the Southern Sates, which is not included in the reckoning.

The Commencement of a New Era.—The shipping through this place, to and from Northern, and even Southern ports, is certainly increasing, and what is more, it will continue to increase. On Tuesday last the Schooner Merinah N. arrived from Philadelphia, with a full cargo of goods and merchandize for the West, among which was a turn-table for the Western N. C. Railroad, and several tons of gas pipe and fixtures, we presume, for Raleigh. Besides this, large quantities of paper have been recently shipped through Newbern, both for Northern and Southern ports. Our town is looking up; let our business men only remain true to her and to themselves and all will be well.

*Newbern Progress.*

First New Cotton.—Two bales of new cotton, says the Charlotte (N. C.) Democrat, "were brought to this market on Friday last, Sept. 3d, one by W. W. McRae, of Providence, Mecklenburg county, which was purchased by R. M. Oates & Co., at 11¼; and one by Robt. Cnnningham, purchased by J. E. Stenhouse & Co., at 11⅛. There is some question as to whose bale arrived in town first—both claim the honor. The weighmaster is of opinion that Mr. Cunningham's was here first and sold first. But there was so little difference in the time, we think the credit ought to be divided between both.

# EDITORIAL.

## RALEIGH, NOVEMBER, 1858.

☞ The Postage on the N. C. Planter is ¼ cent on each No. if paid quarterly in advance; or ½ cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year to any place out of the State.

## State Fair—1858.

The Annual Fair of the North Carolina Agricultural Society, held in this City last week, was *a complete success*, taken in whatever aspect we choose to view it. The number of articles on exhibition, their character and superiority, the immense concourse of persons in attendance, and the interest manifested by all, gave evidence that the spirit of improvement and emulation is abroad in the country—a generous spirit of rivalry in excellence—which must tend greatly to the advancement of all the great industrial pursuits of our good old State.

In giving an account of the articles on exhibition, it is impossible to notice every thing worthy of honorable mention—our space and the circumstances by which we are surrounden, will not permit. We will endeavor, however, to notice most of the prominent articles on exhibition. We will begin with

### FLORAL HALL.

Entering the northern door, on turning to the left, our attention was first attracted by a display of "*Designs*" for Buildings, made by Wm. Percival, Architect, of this City, executed in the finest style of the accomplished Artist's Pencil—such as villas, churches, public halls, &c.

Next we noticed a handsome Painting of Indian Summer, by Mr. J. K. and Miss E. Purefoy, of Wake Forest College.

Some fine Oriental Paintings, by Miss Blanch Fentress, Raleigh; Miss I. J. Holt, Yarboro', of Louisburg Female College; Miss J. A. Wood, Raleigh Female Seminary; and Miss S. E. Graham, of Rowan.

A very fine Pencil Drawing, by Miss B. Fentress. Really well executed.

Handsome Oil Paintings and Pencil Drawing, by Miss E. Martindale, Raleigh.

Landscape Needlework by Mrs. M. J. Fentress, Raleigh. Excellent.

Some very superior Paper Flowers, by Mrs. James Huske, Fayetteville.

Grecian Painting, Miss S. S. Fort.

Worsted work, by Miss E. V. Webb, of Winston, and Mrs. Maria Howerton, Hillsborough.

Handsome specimen of Feather Flowers, by Mrs. S. Atkinson, Wake.

Handsome Grecian Paintings, by Mrs. Frank I. Wilson, Raleigh.

Pencil Sketch of Boy and Pet Lamb, —— Campbell, Raleigh.

Handsome Ottoman Cover, by Miss S. C. Foltz, Salem.

Crochet Lady's Parisian Purse, Miss D., Wake.

Otrefine Feather-work, Miss Julia Pfohl, Salem.

Magnificent Photographs, &c., by Havens & Andrews, Raleigh.

Hair work, by Miss H. Foltz, and Mrs. W. Shultz, Salem.

Magnificent piece of Worsted work, by Miss Mary A. Fowler, Wake.

Handsome Ottoman Cover, by Mrs. Wesley Jones, of Wake.

Shell-work Lamp-stand, Miss S. C. Foltz, Salem.

One Box, Shell-work, Mrs. O. A. Keehln, Salem—very good.

Capital specimen of netting in wool, by Mrs. M. McPheeters, Raleigh.

Very fine piece of Shell painting, in water colors, by Mrs. L. Marling, Raleigh.

Very neat small grecian painting, by Miss Rebecca Smith, Wilmington.

A magnificent Rural Scene Oil Painting, by Mrs. L. H. Walker, Greensboro'—also, two Grecian Paintings.

A Fancy Tidy, by Mrs. G. M. Lea, Alamance.

A nice Candle-stand Toilet, by Mrs. W. D. Rountree, Wilson.

A superior lot of Daguerreotypes, by C. M. Vandersdells.

A magnificent case of Jewelry, made of North Carolina Gold set with most beautiful stones found within 20 miles of Raleigh—exhibited by J. D. Whitford, of Newbern.

Some fine Jewelry, and Silver ware, part manufactured in Raleigh—by J. C. Palmer.

Quilts, Counterpanes, &c., by Mrs. Chas. Horton, Mrs. S. Pace, and Miss Amanda Fowler, of Wake; Mrs. Sarah Hamlin, of Orange; and Miss M. Cameron, of Raleigh.

Splendidly executed Drainage Plates, executed with pen, by Wm. Percival.

2 Jars of Peaches—nice—Mrs. M. R. Harris, Wake.

A very large, varied and superior lot of Preserves, Jellies, Pickles, Fruits, &c., by Mrs. J. C. Palmer.

Excellent specimens of Fruits and Vegetables in air-tight cans, by Mrs. P. F. Pescud, Raleigh.

Also by Misses Du Pre, Raleigh; Mrs. B. F. Moore, Raleigh; Mrs. Jno. R. Williams, Raleigh; Mrs. David Hinton, and Mrs. E. R. Crenshaw, Wake; Mrs. F. E. Shober, Salisbury.

Large collection of Grapes (5 varieties) and Domestic wines, by A. C. Hege, Lexington—some from Currant, Blackberry and Tomato. Also Jellies, Catsups, &c.—a very fine display.

Blackberry Cordial, by Mrs. L. J. Norman, of Wake.

Damson, Apple and Grape Jelly, by Miss Mary E. Mabry, Lexington.

Sugar Cane Syrup, strained Honey and in the Comb, Nectarines in air-tight Cans, by W. J. Shultz, Salem.

A large and superior collection of Pickles, Fruits, Vegetables, &c., (preserved) by Mrs. R. Tucker, Raleigh.

Excellent specimens of colored Plaid and Osnaburgs, by Mrs. L. J. Norman, Wake.

Embroidered Piano stool cover; do.

Chair cover, by Miss H. Foltz, Salem.

Footstool, Miss S. C. Foltz, do.

Poplar Show-case, filled with a large and beautiful collection of fancy boxes made from N. C. wood—attracting much attention, by W. F. Shultz, Salem.

Beautiful case of Wax-work, by Mrs. F. I. Wilson, Raleigh—representing to the life, grapes, peaches, figs, apples, corn, tomatoes, onions, &c. Also, Leather-work "What Not"—elegant.

A beautiful basket of wax fruit, Miss E, Martindale, Raleigh.

Very handsome leather basket, by Mrs. M. C. Garrett, Greensboro'.

Marble Vase, with feather and wax work, by Miss S. Partridge, Raleigh.

Piece of French Rustic Furniture, by Miss Caroline Sievers, of Salem. This is a beautiful specimen of art and taste, and elicited universal admiration.

The "Little Girls Sewing Society of Raleigh," had a very creditable and large collection of plain and Fancy needle work. Also the Sewing Society of the Presbyterian Church,

Set of table and lamp mats, Mrs. G. M. Lea, Alamance.

A Tidy, by Miss M. V. Lott, Salem.

"Goddess of Harvest"—a curious and ingenious execution in wax work, by Mrs. E. McGowan, Raleigh.

Beautifully embroidered Scarf, by Mrs. Dr, D. P. Weir, Greensboro'.

A fine lot of wax and rosin fruits and flowers, by Mrs. N. C. Powell, Goldsboro'.

A splendidly embroidered Vest, Mrs. F. S. Wilkinson, Wake.

A large number of Crochet and other Collars, by quite a number of ladies, too numerous to mention in detail here.

A worked skirt, Miss C. V. Johns.

2 pair infants' socks, Miss Lou. M. Hill.

Basket and Watch Case, Miss Mary Moore.

Lot of Beadbaskets and Baby socks, by the Blind.

Pinebur Basket, Miss L. White.

Needle work basket, Miss L. Moffitt, Davidson.

A glass box do.

A boy's shirt, Mrs. Nancy Lynch, seventy years old.

Embroidered Skirts, by Miss Sarah Reece and Miss Sarah Carter.

Basket waxwork, Misses A. & O. Crocker.

Hair Bracelets, Mrs. M. Rowland, Granville.

Hair Head dresses do do.

Pair Merino Socks, Mrs. R. P. Taylor, of Granville.

Pair Silk Stockings, Miss M. Pittard, of Caswell.

Box of Socks and Hose, Mrs. Husted.

Grecian Painting, Miss K. Eppley, Louisburg Female College.

Monochromatic Painting, Miss S. A. Clarke, Louisburg Female College.

Painting in water colors, do. do.

A "What Not"—leather work, Mrs. J. P. Nelson do.

A number of Pastime Sketches of English Scenery, by Wm. Percival.

Velvet Traveling Bag, embroidered in Chenille, Miss S. Pearce, Newbern; very good.

Grecian Paintings, by Miss S. Partridge and Mrs. F. I. Wilson.

"Magna Mater"—a large finely modeled Bust, in clay, by Mrs. Dr. Mason: her first effort. Very superior.

5 Cameo Breastpins, made by Mrs. Mason.

Bloomer Hat, for child, Miss E. L. Clapp, of Guilford—excellent.

Emb'd Sleeves and Collar, Miss R. S. Smith, Wilmington.

Collars and Sleeves, Mrs. Husted.

Thread Lace Collar, Miss S. Partridge.

*Musical Instruments.*—Piano, 7 octave, J. E. Boswell & Co., Baltimore, very superior tone and finish, and seemed to attract the admiration of professors and amateurs. Full iron frame.

Pianos, T. A. E. Bohnstedt, of Wilmington, two of Chichering's make, Boston—Louis 14th style—full iron frame.

Alexandre Organ—exhibited by C. L. Irving, Raleigh. An instrument of extraordinary merit, combining the delicate touch of the Piano and the full round notes of the largest church Organ.

Prof. Emmons had on exhibition some great curiosities in the way of Preserved Fish, and specimens of N. C. Minerals, among which were slate ore containing oil and benzole; fire-brick clay found in Wake; granite from which fire-brick clay originates; black band ore, containing Kerosene oil and benzole; hydraulic limestone and balls; Kerosene oil made from N. C. Black band ore found in Chatham; barytes for white paint; hæmatite (iron ore) found in Johnston co.; variegated copper, 4 specimens, Gneiss, fine building stone, found in Harnett; also massive specular ore; silicious slate, and red oxide of copper, Chatham; also Freestone; Gardner hill quartz vein and ore, Guilford; venus permagua, marl bed, Brunswick, &c.

Fruits.—Westbrooks & Mendenhall, Guilford, fine collection of Fruits, representing over 100 varieties of Apples, 16 varieties of Pears, 5 of Peaches, 2 of Quince, sev Raspberries, 26 of Strawberry plants.

J. & O. Lindley, Alamance and Guilford, fine collection of Apples, representing over 100 varieties. Extra fine.

W. J. Palmer, near Milton, 30 varieties of Apples, grown on trees three and four years from planting—certainly very fine, and demonstrating how soon a bearing and profitable orchard can be reared.

### PLANTER'S HALL.

Hungarian Grass and Seed, Jabez Smith, Petersburg, Va.

Herds' Grass Seed, by John Stafford, Alamance.

Hungarian Grass Seed, Charles Horton, Wake.

Cotton Stalk, full of bolls from root to tip, by N. Price do A. T. Mial.

Fine specimen Mullets, G. W. Taylor, Beaufort.

Bay Seed Cotton—matures much earlier than any other variety, by A. T. Mial—pronounced admirable by Planters in this section.

Fine specimens corn, W. D. Jones, W. W. Pace, A. T. Mial.

Twin Corn, J. M. Towles.

Black Peas, N. Price—will stand winter.

Winter Oats, Chas. Manly.

Great variety of Beans and Peas by different exhibitors, among which is the early prolific Va. pea—believed two crops can be made in one year in this climate, by Thos. Bailey, Wake.

White Wheat seed, Mrs. B. F. Moore and also W. R. Knight.

Poland Wheat, J. R. Dunn.

Some fine corn meal, E. L. Hall.

Box of Corn, yielding 17 barrels to the acre, J. W. Wiggins, Raleigh.

Large and splendid lot of Sweet and Irish Potatoes, by a number of exhibitors.

Some fine Celery by E. Hall, also Mrs. L. D. Henry.

Sap Ash Pumpkin, weighing 80 pounds, by E. B. Wilder, Greensboro'.

Some Extra fine Irish Potatoes, by S. H. Christian, Montgomery co. Also some Kentucky White corn.

Large fine Cabbages, exhibited by Mrs. Judge Ruffin and from the Insane Asylum.

Dried Peaches, in Sugar, a new and choice article—Westbrook & Co.

Splendid Tobacco by Y. & E. P. Jones, Yanceyville, various manufactures and brands.

2 samples chinese Syrup, one boiled in iron kettle the other in brass—both very fine—by Thos. Bailey, Wake.

1 long Muskmelon, for pickling, near two feet in length—T. Bailey, Wake.

Jar of Butter, very superior, by Miss J. E. Caldwell, Morganton.

2 Jars superior Potted Butter, by Mrs. S. C. Jones, Wake.

A firkin of very superior Butter, by Mrs. Dr. Williamson, of Caswell.

3 gallons Chinese Syrup, by Sylvester Smith, Raleigh. Very fine.

Jar fresh Butter, Mrs. W. B. Williams, Warren. Excellent.

10 lbs. dried Grapes, Mrs. E. J. Norman, Wake.

Barrel Flour, J. S. Holt, Alamance. The very best.

1 bbl. and 1 bag Flour, W. L. Davidson, Charlotte. 1st. class.

Superior corn meal, H. McLean, Harnett. Also by Sylvester Smith, Raleigh. Also, by Forest Man. Co., Wake. Also by same Co. bag of Bran, and bag and bbls. of Flour.

Some splendidly dried Peaches by Mrs. J. W. Harris, Wake.

Bbl. Flour, Alston Hall.

do do Stokely & Oldenham.

Bbl. superior Cider Vinegar, A. T. Mial, Wake.

Many other articles, ought to be mentioned, but we have not room or time to enumerate them.

### MECHANIC'S HALL.

Very superior sole and upper Leather, by Ramsour & Seagle, Newton, Caldwell Co.

A foot morticing Machine, by L. P. Clifford & Co., Graham—spoken of very highly.

1 sliding door Architrave; circular sash and blinds; Veranda column; circular headed window; rolling slat blinds, &c., all by Briggs & Dodd, Raleigh—pronounced by judges to be of the first order in design and execution.

Large Window Sash, by Murdoch, Darby & Co., Salisbury. No. 1.

Also Blinds, &c., by W. F. Shultz, of Salem.

Stained glass sash, T. Cotes, Raleigh. Very beautiful.

Large lot of Brooms, made at Inst. for Deaf, Dumb and the Blind. No. 1—cannot be excelled.

Kip skin, Harness and Russett Leather, by R. Livingston, Franklinton, very superior.

Also a fine lot of Leather, by R. F. Simonton, of Statesville.

Superior Spring, Shuck and Cotton and curled Hair Mattrasses, by Wm. Watson, Raleigh. Good as can be made.

Variety of meat and sausage cutters, J. M. Towles, Raleigh. Also Churns, Ice cream freezers, &c.

Williams & Harp, Raleigh, exhibited a fine collection of Spokes, Rims, Shafts and Hubs, made at their factory in this city. No necessity for sending north for these articles, while such can be furnished here and on as cheap terms.

Some fine book and news Paper, by Forest Manufacturing Co., Wake.

Lot of fine Axes by Sylvester Smith, Raleigh, and perhaps others.

Model of self-waiting dining table, by J. H. Farmer, Chatham. Dispenses with servants.

Large and beautiful lot of Hollow ware, W. B. Williams, of Warren, made at his factory.

Some fine specimens of brown Sand Stone, by Maunder & Campbell. Also, by Grier and McGowan, both of Raleigh.

C. M. & G. Lines excellent lot of strong Brogans, from their factory at Thomasville, in Davidson.

2 sets of Blacksmith's Tools, and Horseshoes, by D. C. Richardson, Weldon. Also, miniature set of Tools, very ingeniously finished.

Walnut Ottoman, by W. F. Shultz, Salem.

6 pair coarse Shoes, J. W. Harris, Wake.

Some fine Saddles, C. W. D. Hutchings, Raleigh.

Very fine single and double Harness, by Hardy Harris, Henderson.

1 fine Coachee, by B. J. Perkinson, and two very superior Buggies, by Alfred Upchurch, Raleigh.

We have doubtless overlooked many articles in this department, but we have to content ourself with enumerating the most conspicuous.

☞ We have unfortunately lost our memorandum containing the list of Agricultural and other Implements on exhibition on the grounds; also of the Stock, Fowls, &c., and are therefore unable to give a detailed account of them. Of the former, we may say at none of the preceding Fairs has near as many such articles, of our own State manufacture, been exhibited. Every thing needed on a Farm, it seems to us, can be procured in our own State, of our own manufacturers.

The stock of Cattle was not as good as usual, nor as large, but some very fine cows, bulls, &c., were on exhibition.

The Poultry was very fair, but as a whole not as fine as made at former exhibitions.

Before closing this part of our report, we must make distinguished mention of the specimens of Gold and gold ore exhibited by S. H. Christian, of Montgomery county. We had heard of the wonderful products of his mines, but we were not prepared to see such extraordinarily rich specimens. California, Australia, Fraser's mine and every where else, must yield the palm to North Carolina, if such ore can be found in abundance here.—We think the most appropriate premium that can be given Mr. Christian, will be a gold medal; with suitable inscriptions—and we hope it will be done.

### The Speech.

The Address by Hon. T. L. Clingman, on Thursday, is spoken of by those who were fortunate enough to hear it, to have been eloquent and patriotic, well worthy of the fame of its distinguished Author. We have not room for it, on account of its great length.

### The Crowd.

The largest number of persons that have attended our State Fairs, were present last week. On Thursday, it was believed there were from 8 to 10 thousand persons on the grounds. And yet in the midst of all this throng, the hundreds of vehicles, &c., we have not heard of any accident occurring worthy of notice; and unlike its predecessors, we have heard of few pockets being picked last week. Another gratifying fact we will mention: we saw very few drunken men, which may be attributed in a great degree to the excellent rule of the Society, that no intoxicating liquors are allowed to be sold on the grounds.

### The Ladies.

We cannot resist the duty of awarding a high meed of praise to the fair Matrons and Maidens who contributed so essentially to the success of the Fair. Quite a number gave the whole week to attendance on Floral Hall—and as members of Committees for awarding Premiums, they were found prompt and intelligent associates, and their presence made the duties of the sterner sex pass as delightful labors of love. In a clear bumper of sparkling water, we drink to the health of the *Fair* of the Fair of 1858.

### The Band.

The Salisbury Brass Band was employed by the Committee to discourse sweet sounds on the Fair Grounds, and they performed that duty to the admiration of all. The gentlemen composing the Band are *gentlemen* indeed, behaving themselves with dignity and courtesey. Our sister town of Salisbury may well be proud of them, and their music.

## LIST OF PREMIUMS AWARDED.

### CLASS A—LIVE STOCK.

*No. 1.—Thoroughbreds.*

*Judges.*—Dr. Pride Jones, Dr. Jno. E. Williamson, R. W. Lawson, Geo. T. Cooke. Best Stallion 4 years old and over, J. H. Boswell, Nick of the Woods, $50. 2d best, J. Turner, Jr's., Secession, 25. Best do., 2 and under 4, M. T. Hawkins' Blue Gray, 15. Best brood mare, 4 and over, J. Turner's Black Ann, 20. Do., with foal by her side, T. Cain's Trustee, 25. Do., do. Jackson Moss' Mary, 15. Best filly, 2 and under 4, J. Turner's Pocket Produce, 10. 2d. do., K. Plummer's Lucy Cotton, 5.

*No. 2.—Quick Draught and Saddle Horses.*

Best Stallion, 4 years and over, Dr. J. R. Moore's Saratoga, 50. 2d ditto, W. S. Battle's Gold Finder, 25. Best do., 2 and under 4, F. G. Thorne's Selim, 25. Do. Dr. Cain's horse, 15. Best ditto, 1 and under 2, K. Plummer's Tom Morgan, 10. 2d ditto, G. T. Cooke's Prince, 5. Best brood mare, 4 and over, J. H. Holloway's Jenny Lind, 20. 2d do., W. C. Mangum's Mary Top, 10. Best filly, 2 and under 4, J. H. Holloway's Ribbon, 10. 2d do., J. Turner's Flora Temple, 5. Best saddle horse, mare or gelding, Dr. J. R. Moore's Jim Crow, 15. 2d do. E. T. Garrett's mare, 10. Best pair matched carriage horses, T. H. Rainey, 20. 2d ditto Calvin Smith, 10. 2d do. raised in the State, J. L. Rhem, 10. Best single harness horse, S G Hayes, 15. 2d do. W W Happer, 10. Best do., raised in the State, J W Wiggins, 15. 2d do. W H Watson 10.

*No. 3.—Heavy Draught Horses.*

*Judges.*—J W Lewis, N L Williams, R C Pearson, R P Taylor, R W Lassiter, T Bridgers.—Best Stallion, 2 and under 4 years, T C Bradshaw, 10. Best brood mare, 4 and over, with foal by her side, W D Jones, 15.

*No. 4.—Jacks and Jennets.*

*Judges.*—D W Sanders, D Hinton, J W B Watson.—Best imported Jack with approved certificates, Jeff Green, 25. Best Jack raised in the State, A J Lloyd, 15.

*No. 5.—Mules.*

Second best pair mules, 3 years and over, Major W D Jones, 10. Best single mule, Wm Russell, 10. 2d do H P Horton, 5.

### CLASS B.—LIVE STOCK.

*No. 6.—Cattle—North Devons.*

*Judges.*—B Grimes, Jr., Josiah Turner, L Mallett.—Best bull calf, 1 and under 2, Dr F J Haywood, 10. Best cow, 3 and over, Sylvester Smith, 10. 2d do Sylvester Smith, 5. Best heifer, 2 and under 3, Sylvester Smith, 10. Do., 1 and under 2, Sylvester Smith, 10.

*No. 7.—Durhams.*

Best bull calf under 1 year, W Russell, 5. Best cow, 3 and over, W Russell, 10. 2d do. Mrs. J. F. Taylor, 5.

[A cow with a calf of Major Crenshaw's was under the required age, or she would have got a premium.]

*No. 12.—Grades.*

*Judges.*—Charles Manly, T Cain, W R Crawford, E Smith, Dr E A Crudup.—Best bull, 4 years and over, S H Young, 25. Do., 3 and under 4, Seth Jones, 20.

Best bull calf, 1 and under 2, W W Holden, 10. Do., under 1 year, E Hall, 5. Best cow, 3 and over, W Russell, 10. 2d do. E Hall, 5. Best heifer, 2 and under 3, W Russell, 10. Do. 1 and under 2, W Russell, 10.

### *No.* 16.—*Working Oxen.*

Best yoke of oxen, W R Crawford, 15. 2d best, Major Crenshaw, 5. Best single ox, G L Goodwin, 5.

### *No.* 17.—*Fat Cattle.*

*Judges.*—Needham Price, W Russell, E Smith, Col Jones.—Best pair fat steers or oxen, Maj Crenshaw, 12.

### *No.* 18.—*Sheep—Merinos.*

*Judges.*—H K Burgwyn, Seth Jones.—Best buck, R P Taylor, 15. Best pen of ewes, R P Taylor, 15. Best pen of lambs, R P Taylor, 10.

### *No.* 25.—*Swine—Large Breed.*

*Judges.*—J Hutchins, J A Hicks, J F Slade.—Best boar over 2 years, J J Ferrell, 10. 2d best J J Ferrell, 5. Best do. over 1 and under 2, J R Dunn, 5. Best lot of pigs, under 10 months old, Dr F J Haywood, 5.

### *No.* 26.—*Swine—Small Breed.*

Best boar over 2 years, E Hall, 10. 2d do. Henderson Smith, 5. Best sow over 2 years, Jas Young, 5. 2d do. E Hall, 3. Best breeding sow with pigs, H Smith, 10.

### *No.* 27.—*Grades.*

Best lot of pigs under 10 months old, Jas Young, 6. 2d do. S H Young, 3.

### *No.* 28.—*Natives.*

Best boar over 2 years. R Flemming 10.

### *No.* 29.—*Poultry.*

*Judges.*—John T Williamson, B L Vick, L W Burrows.—Best gray or Bramah Pootras, L R Vaughn, 3. Best Javas, Mrs J Nixon, 3. Best lot of games, Jackson Moss, 3. Best do. Sumatra games, James Boylan, 3. Do. wild india games, J M Crenshaw, 3. Best pair wild turkeys, L A Norman, 3. Do. domestic, do. E Hall, 3. Do. wild geese, T H Selby, 3. Do. common geese, Peter Plum, 3. Do. Muscovey ducks, W H Holloman, 3. Do. Raven ducks, E Hall, 3. Do. pea-fowls, R W Wynn, 3. Do. guinea fowls, E Hall, 3. African bantams, P F Pescud, 2. White do. W. C. Upchurch, 1. Wild Indian do. Geo. Miller, 2.

## CLASS C.—AGRICULTURE.

### *No.* 30.—*Agricultural Productions.*

*Judges.*—R H Bridgers, L O'B Branch, W B Williams, W R Smith, H T Clarke. Best variety of wheat, J R Dunn, 3. Do. corn for bread, W D Jones, 3. Do. for stock, J L Britt, 3. Do. rye, A T Mial, 3. Do. field peas, Mrs P C Person, 3. Do. beans, W R Knight, 3. Do. sweet potatoes, cooked, Mrs J L Britt, 3. Do. irish do. J M Lea, 3. Best cotton in stalk, C L Hinton, 3. Do. grass seeds adapted to the South for hay or grazing, W F Shultz, 3. Best bale of cotton, A T Mial, 10. Do. bbl. cider vinegar, A T Mial, 3.

### *No.* 31.—*Salt Provisions.*

*Judges.*—B T Blake, J U Kirkland, J Winslow, N L Williams, W C Upchurch. Best half dozen hams, Mrs Ruffin Tucker, 10. Best bbl. mullets, G W Taylor, 5. 2d do. W H Putney, 3.

### *No.* 32.—*Butter and Cheese.*

Best sample of fresh butter, Miss J E Caldwell, 10. 2d do. Mrs. Norman, 5. Best firkin butter, Mrs S C Jones, 10. 2d do. W Russell, 5.

### *No.* 33.—*Flour, &c.*

Best bbl. wheat flour, J S Holt, 10. 2d do., Forest Manufacturing Company, 5. Best corn meal, do do 5. Best starch from wheat, Mrs R W Wynn, 3. Best wheat bread, Mrs D Fisher, 3. 2d do. Mrs W B Williams, 2. Best corn bread, Mrs J L Britt, 3. Best butter crackers, Mrs W B Williams, 3. Best strained honey, Mrs W F Foltz, 3. Do. in the comb, Mrs W F Shultz, 3.

### *No* 34—*Preserves, Pickles, &c,*

*Judges.*—Jno. S. Dancy, W. W. Holden, Dr. W. H. Battle. Best preserved peaches, Mrs. E. W. Crenshaw, $3. Best preserved plums, Misses DuPre, 3. Best preserved quinces, Mrs. B. F. Moore, 3. Best preserved apricots, Misses DuPre, 3. Best preserved pears, Misses DuPre, 3. Best preserved cherries, Misses DuPree, 3. Best green pickles, Mrs. R. Tucker, 3. Best yellow pickles, Mrs. F. E. Shober, 3. Best sweet pickles, Mrs. P. C. Person, 3. Best fruit jellies, Miss M. E. Mabry, 4. Best tomato catsups, Mrs. Ruffin Williams, 3.—Best brandy peaches, Mrs. R. Tucker, 3. Best cordials, Mrs. B. F. Moore, 3. Best dried peaches, Westbrook & Co., 3. 2d do., Mrs. Means, by Mrs. Harris, 2. Best dried apples, do., 3.

### *No. 35—Fruit in Cans.*

Best peaches, Mrs. P. F. Pescud, $3.—Best grapes, Mrs. W. F. Shultz, 3. Best cherries, Mrs. R. Williams, 3. Best quinces, Mrs. W. F. Shultz, 3. Best tomatoes, Mrs. P. F. Pescud, 3. [Committee unable to decide between Mrs. B. F. Moore and Mrs. Palmer on preserved apples—both superb.]

### *No. 36—Native Wines.*

*Judges.*—Dr. R. S. Mason, Gen. J. Winslow, A. M. Lewis, Dr. J. E. Williamson, C. E. Greenleaf, J. A. Engelhard. Best dry Catawba, D. M. Lewis, $5. Best sparkling wine, D M Lewis, 5. Best blackberry wine, Mrs Gen Winslow, 5. 2nd best, Miss M L Winslow, 2. Best and greatest variety, A C Hege, 10. Best cider in bottles, S Smith, 5.

### *No. 37.—Fruit adapted to South.*

Best and greatest variety of pears, Westbrook & Co., $10. Best peaches, Westbrook & Co., 10. Best quinces, Westbrook & Co., 5. Best grapes, A C Hege, 10.

### *No. 38—Fruit trees adapted lo the South.*

Largest and best variety of apple trees, Westbrook & Co., $10. Largest pear trees, Westbrook & Co., 10. Largest peach trees, Westbrook & Co., 10. Largest cherry trees, Hamilton & Carter, 10.—Largest nectarine trees, Hamilton & Carter, 5. Largest apricot trees, Hamilton & Carter, 5. Largest plum trees, Hamilton & Carter, 5. Largest strawberry vines, Westbrook & Co., 2. [The committee favorably notice rum made from Chinese sugar cane by Mr A Howel, of Edgecombe and H McLean, of Harnett. No premium offered. They also recommend Mrs. J. & O. Lindley and Westbrook & Co., each for a first class premium for the fine exhibitions of apples. $10 each awarded. They further recommend Willie J. Palmer for 35 varieties of apples exhibited by him, raised from the nursery in four years. Size and quality excellent.]

### *No. 39—Vegetables.*

*Judges.*—Jordan Womble, Sen., S W Westbrook, C F Faucett. Best celery, Mrs L C Henry, $2. Best cabbage, Mrs Judge Ruffin, 2. Best egg plants, E C Hege, 2. Best squashes, R J Owen, 2.—Best onions, E C Hege, 2. Best beets, for table, Mrs L C Henry, 2. Best beets, sugar, E C Hege, 2. Best parsnips, Rev T S Campbell, 2. Best turnips, A T Mial, 2. Best Carrotts, E C Hege, 2. Best Salisfy, E C Hege, 2. Best irish potatoes, G M Lea, 2. Best sweet potatoes, A T Mial, 2.

## CLASS D.—MECHANICS.

### *No. 40—Plows.*

*Judges.*—J Devereux, L R Caldwell, A T Mial, Jos Dixon. Best three horse plow, J H Thompson, $6. Best two horse plow, E Whitman & Co., 5. 2d best, J H Thompson, 4. Best two horse plow, manufactured in State, J H Thompson, 5. 2d best manufactured in State, N Boyden & Son, 4. Best single horse plow, J N Thompson, 3. 2d best single horse plow, N. Boyden & Son, 3. Best single horse plow, manufactured in State, J N Thompson, 4. 2d best manufactured in State, N Boyden & Son, 3. Best subsoil plow, N Boyden & Son, 5. Best manufactured in State, N. Boyden & Son, 5. 2d best, manufactured in State, W B Williams, 4. Best double moulboard plow, N Boyden & Son, 5. Best manufactured in State, W B Williams, 5. 2d best manufactured in State, D C Richardson, 4. [The judges highly recommended to favorable notice a cotton cultivator made and about to be patented by Mr. Palamountan, of Edgecombe. The Executive Committee awarded a premium of $3. They also noticed a subsoil and turning plow, combined, exhibited by Mr. Smith, of Franklin, and Mr. Dickson, of Orange, and one by Mr R S Milton, of Stanly, patented by J P Harris, of Miss. The latter was overlooked in the examination.]

### *No. 41—Harrows, &c.*

*Judges.*—J M Morehead, H O Durham, Col J R Zollicoffer. Best harrow, D C Richardson, $5. 2d best harrow, W B Williams, 2. Best horse corn planter, S Smith, 5. 2d best, E Whitman & Co., 2. Best hand corn planter, R Sinclair & Co., 5. 2d best hand corn planter, R Sinclair & Co., 2. Best planter for small seed, R

J Owen, 5. Best iron roller (smooth) R Sinclair & Co., 5. Best roller for crushing clods (serrated,) R Sinclair & Co., 5. Best cultivator for general purposes, N Boyden & Son, 5. 2d best, N Boyden & Son, 2. Best corn cultivator, W B Williams, 5.—2d best, D C Richardson, 2. Best wheat drill, E Whitman & Co., 5. Best cotton scraper W B Williams, 5. [The judges recommend a one-horse harrow exhibited by J M Towles.]

### *No.* 42—*Threshing Machines, &c.*

*Judges.*—T J Lemay, L Hinton, H Mordecai. Best threshing machine, N Boyden & Son, $15. Best fanning machine, J. Montgomery, 10. Best hay, stalk, and straw cutter, J H Thompson, 10. 2d best, N Boyden & Son, 5. Best vegetable cutter for stock, E Whitman & Co., 5.

### *No.* 43—*Corn Shellers, &c.*

Best corn sheller, horse power, N Boyden & Son, $10. 2d best, E Sinclair, (exhibited by J M Towles,) 5. Best corn sheller, hand-power, J H Thompson, 10. 2d best, E Whitman & Co., 5. Best corn and cob crusher, horse-power, Maynard's patent, (exhibited by S Smith,) 10. 2d best E Sinclair, (exhibited by J M Towles,) 5.

## CLASS E.—MECHANICS.

### *No.* 44—*Reaping and Mowing Machines.*

*Judges.*—W D Williamson, H K Burgwynn. Best reaping machine, R L Allen, $20. Best mowing machine, R L Allen, 20. Best sweep horse power, N Boyden & Son, 20. 2d best, J H Thompson, 10.

### *No.* 45—*Farming Implements, &c.*

Best horse-rake, E Whitman & Co., $5. Best farm or road scraper, N Boyden & Son, 5. 2d best, John Stafford, 2. Best cider mill, E Whitman & Co., 10. Largest and best mill for crushing Chinese Sugar Cane, N Boyden & Son, 20.

### *No.* 46—*Carriages, Wagons, &c.*

*Judges.*—J A McMannen, T D Hogg. Best two-horse pleasure carriage, B J Perkinson, $25. Best one-horse open buggy, A Upchurch, 15. Best farm wagon for six horses, N Price, 15. Best farm wagon, for four horses, W F Fort, 15. Best farm wagon, for two horses, iron axles, H Horton, 10. 2d best, W F Fort, 4. Best horse cart, (dumping) iron axles, H Horton, 6. 2d best, W F Fort, 3. Best hand cart, W F Fort, 4.

## CLASS F.—MECHANICS.

### *No.* 47—*Machinery.*

*Judges.*—J D Whitford, C F Fisher, W J Hawkins, L O'B Branch, Silas Burns, R C Pearson. Best smut machine, McMannen & Dixon, 10. [No other article in this class was deemed worthy of a premium.]

### *No.* 48—*Farming and Domestic Tools.*

*Judges.*—Governor Bragg, Jacob Mordecai, G H Wilder, J T Russell. Best churn, Sinclair & Co., $3. Best sausage cutter, W H & R S Tucker, Ag'ts, 3. Best grain cradle, Sinclair & Co., 3. Best hay-knife, for cutting down hay and straw stacks, E Whitman & Co., 2. Best scythe-snathe, E Whitman & Co., 2. Best briar hook, S Smith, 2. Best weeding hoes for corn, T Reinhardt, 2. Best three axes made in the State, S Smith, 2. Best set of horse shoes made in the State, D C. Richardson, 2. Best and most numerous collection of agricultural implements, Sinclair & Co., 25. Best manufactured in the State by exhibitor, N Boyden & Son, 25. Best model of pump (hydraulic elevator,) Dr. DuPre, 10.

### *No.* 49—*Saddlery, &c.*

*Judges.*—Jeff Fisher, A Upchurch, W D Jones. Best buggy harness, Hardy Harris, $8. 2d best, Hardy Harris, 4. [A premium of $5 awarded to C W D Hutchings for a plain saddle without bridle or martingale, on recommendation of Judges.]

## CLASS G.—MECHANICS.

### *No.* 50—*Cabinet Work.*

*Judges.*—D W Courts, J W Syme, F I Wilson, Wm Thompson, Ex-Gov Reid, J D Somers. Best rocking chair, W F Shultz, $3. Best window sash, T Cotes, 5. Best window blinds, Dodd & Briggs, 5.—[The Ex. Com. awarded a premium of $30, to W F Shultz, on the recommendation of judges, for the best collection of Cabinet work.]

### *No.* 51—*Shoes, Hats, &c.*

*Judges.*—S G Hayes, Jas McKimmon, J D Powell. Best pair men's boots, Ramsour & Seagle, $3. Best half dozen brogans, G W Harris, 8. 2d best, C M & G Lines, 3.

### *No.* 52—*Sundries.*

*Judges.*—A C Hege, W D Palmer, B T Blake, Gen C M Avery. Best pianoforte, Bohnstedt, (Chickering's,) $10. An organ, C L Irving, 10. Best cast hollow ware, W B Williams, 5. Best leather, sole, calf and kip, Ramsour & Seagle, 5. Best side of harness leather, R F Simonton, 2. Best dressed buck, sheep and goat skins, W F Shultz, 2. Best and greatest variety of mechanics tools manufactured in State, D C Richardson, 10. [The judges recommended the following which were allowed: 2 sides of sole leather, R F Simonton, $3; lot of kip, russet, calf and harness leather, exhibited by R Livingston, $3; one coffee mill, R F Shultz, $2; 1 morticing machine, by L D Clifford & Co., $5, lot of blacking, A J Woodward, $1.]

## CLASS H.—MANUFACTURES.

### *No.* 53.—*Mill Fabrics.*

*Judges.*—R W Lawson, G M Lea, Josiah Turner, jr.—Best piece of cassimere, W H & R S Tucker, Agents, $10. Best sattinette, 6. Do. woolen jeans, 5. Do. flannel, Mrs Jno Adams, 5. Do. pair blankets, Mrs R Broughton, 5. Do. piece woolen carpet, Mrs J F McCorkle, 10. Do. hearth rug, Mrs C A McRae, 3. Do piece bed-ticking, Mrs C Horton, 3. Do. cotton jeans, Charles L Horton, 5. Do. bundle printing paper, Forest Manufacturing Co., 6. Best hair mattress, W Watson, 5. Do. matress of moss, shucks or cotton, Wm Watson, 5.

### *No.* 54.—*Household Fabrics.*

*Judges.*—J K Marriott, Mrs Gen Singletary, Mrs Gen Crenshaw, Mrs W M Boylan.—Best patch-work quilt (cotton) Mrs Husted, $5. Do. do. Miss Sallie Graham, 2. Best do. (silk) Mrs L Marling, 5. 2d do. Mrs M Harris, (60 years old) 2. Best raised work quilt, Mrs Jno Adams, 5. 2d do. Mrs. John Adams, 2. Best counterpane, (woven,) Mrs Chas Horton, 5. 2d do. Mrs S Pace, 2. 2d do. Miss J G Cain, 2. Best do. (crochet) Mrs R Tucker, 5. 2d do. Mrs R Tucker, 2. Best hearth rug, Miss C A McRae, 5. Do. pair yarn hose, Mrs W——, of Wake, 2. Do. silk hose, Mrs R P Taylor, 2. 2d do. Mrs M Pettard, 1. Best woolen shawl, Miss M Cooke, 3. 2d best, Mrs Womack, 1. Best piece negro woolen cloth, Mrs L J Norman, 5. Best piece tow cloth, Mrs W F Shultz, 5. Do. piece tow and cotton cloth, Mrs C Horton, 3. Do. linen, Mrs L J Norman, 5.

## CLASS I.—MANUFACTURES.

### *No.* 55.—*Fine Crochet Work.*

*Judges.*—Mrs Cotten, Mrs Primrose, Mrs G W Mordecai, Miss Partridge, Miss S Sanders.—Best collar in spool cotton, Miss M E Cooke, $4. 2d do. Miss G. Walter, 2. Best undersleeves in do., Miss M E Cooke, 4. Best specimen of lace, Miss Ella ——, of Wake, 3. Best specimen crochet work in silk with beads, Mrs E ——, of Wake, 4. 2d Best do. Miss D ——, of Wake, 2 Best crochet shawl, Mrs E Gordon, 5. 2d do. Mrs Womack, 3. Best set table mats in tidy cotton, Mrs G M Lea, 3. 2d do. Miss C ——, of Wake, 2. Best tidy in tidy cotton, Mrs A., of Wake, 3. 2d do. Miss M M Lott, 2.

### *No.* 56.—*Embroidery in Silk.*

*Judges.*—Miss S Patridge, Mrs D W Sanders, Mrs Nixon, Miss Wiggins.—Best lady's mantle, Mrs R Williams, $6. 2d do. Mrs A Henderson, 3. Best vest, Mrs A Wilkerson, 6. 2d child's dress, Mrs A Henderson, 3. Best sack or spencer, Miss S Partridge, 3. 2d do. Miss L A Cooke, 2. Best infant's cap, Mrs R Williams, 2. 2d do. Mrs Marling 1.

### *No.* 57.—*Embroidery in Worsted.*

*Judges.*—Mrs J E Williamson, Mrs Gen Singletary, Mrs Alfred Williams, Mrs W W Holden.—Best piano cover, Miss E Wyes, $4. 2d do. Miss E Wyes, 2. Best table cover, Miss Towles, 4. 2d do. Miss S Pearce, 2. Best chair cover, Miss B M Cobb, 4. Do. ottoman cover, Mrs M Howerton, 4. 2d do. Miss V F Webb, 2. 2d do. hearth rugs, Mrs Owen, 1. Best worked slippers, Miss F G Roulhac, 2.

*No. 58.—Knitting or Netting.*

*Judges.*—Miss Colburn, Mrs R S Tucker.—Second best specimen of Knitting or netting in wool, Mrs McPheeters, 2. 3d do. Mrs W D Rountree, 1.

*No. 59.—Fancy Work.*

Best ornamental shell-work, Mrs O A Keehln, 5. 2d do. Miss S C Foltz, 2. Best specimen wax flowers, Mrs N C Powell, 5. Best do of wax fruits, Mrs F I Wilson, 5. do do of feather work, Miss Julia Pfohl, 5. 2d do. Mrs Atkinson, 2. Best specimen hair work, Mrs W Shultz, 5. 2d do. Miss A Foltz, 2. Best frame, (leather work,) Mrs F I Wilson, 5. 2d do. Mrs J P Nelson, 2. 3d do. Eiss Garrett, 1. Best paper flowers, Mrs J Huske 2.

*No. 60.—Needle Work.*

*Judges.*—Mrs J B Bobbitt, Mrs Governor Bragg, Mrs Marling, Mrs Cotten, Mrs W H Harrison, Miss Roulhac, Miss Somerville, Mrs. Gilmer.—Best collar and chemisette, Mrs G M Lea, $4. 2d do. Miss R B DuPre, 2. Best undersleeves, Miss A F Dupre, 3. 2d do. Miss R S Smith, 2. Best handkerchief, Miss Partridge, 2. 2d do. Mrs W A McGuire, 1. Best child's dress, Miss J M Ruffin, 4. 2d do. Miss A Reynolds, 2. Best lady's underskirt, &c., Miss DuPre, 2. 2d do. Miss C Y. Jones, 2. Best gentleman's shirt, Miss R B Dupre, 3. 2d do. W A McGuire, 2. Best boy's do. Mrs G——, Wake, 2. 2d do. (extra work) Mrs G Lynch, 1. Best infant's do. Mrs D P Weir, 2. 2d do. Mrs Watson, 1. Best lace collar, Mrs. Partridge, 2. Do. worked band and sleeves, Mrs H E Peebles, 2. 2d do. Miss A E C., Raleigh, 1. Best mantle, Mrs. A Henderson, 3. Best infant's dress beautifully made, Mrs D. P. Weir, 2.

*No. 61.—Fine Arts.*

Best specimen of daguerreotypes, T J Haven, 5. Do. specimen ambrotypes, T J Havens, 5. Do. do photographs, Havens & Andrews, 5. Best piece colored photographs, Miss Partridge, 5. Best improvement on ambrotypes or daguerreotypes, Mr. Havens, 5. Best specimen of painting in oil, Mrs. Walker, 10. 2d do. Miss Partridge, 5. Best specimen of water colors, W Percival, 10. 2d do. Mrs Marling, 5. Best specimen of Grecian painting, Miss L Bryan, 5. 2d do. Mrs Walker, 3. Best crayon drawing, Mrs R S Smith, 5. 2d do. Mrs S A Clarke, 3. Best architectural drawing, W Percival, 4. Best pastil drawing, Mr. Andrews, 3.

[Miss Partridge's specimen of oil painting is well drawn and fairly executed; but being a copy, the committee deemed Mrs. Walker's oil painting, (as being a sketch from nature,) most worthy of the first premium, especially, as it bears a favorable comparison, in execution, with Miss Partridge's painting.]

## DISCRETIONARY PREMIUMS.

### FLORAL HALL.

*Committee*: Mrs E Primrose, Mrs R Williams, Mrs L Cotton, W Percival, R H Battle, J [illegible] an.

"M[illegible] Mater,' a beautiful Bust made of white [illegible], by Mrs Dr Mason, of Raleigh, a work of decided genius, we mark No. 1, and recommend an extra premium, $25.

5 Cameos, by Mrs Dr Mason, of Raleigh, No. 1, and recommend a premium, $25

A very superior case of Dentistry, by J A McDowell, very fine, deserve honorable mention and a first class premium.

Stand of Jewelry, of North-Carolina gold and precious stone found within 20 miles of Raleigh, by John D Whitford, Newbern, deserves most honorable mention, but the work being executed in New York bars us from recommending premium.

We mark No. 1 a lot of articles (22 pieces) made by the "girls working society," of Raleigh, $5.

Also, 10 pieces by the "ladies sewing society," of the Presbyterian church, Raleigh, $5.

Also, "Corn in air-tight Cans," by Mrs P F Pescud, Raleigh. Very perfect, $2.

Also, some "Peach Mangoes," and "preserved Citron," by Mrs Ruffin Williams, Raleigh.

Suit of Clothes made of North Carolina Cassimere, by Mrs Ellen, of Raleigh. Well worthy of an extra premium.

A "Bloomer Hat," made of chipped paper, beautiful and ingenious, we mark No. 1.

Crochet Counterpane, by a Deaf Mute, Mrs. K., of Raleigh, we recommend a small premium, $3.

Lot of plain Jewelry, manufactured in Raleigh, by J C Palmer, Jr., worthy of premium, $5.

Map of Common School Districts of Union county, executed with types and in colors, by John Spelman, exhibited by Holden &

Wilson—really a work of art and ingenuity, worthy of a handsome premium, $5.

Oriental Oil Painting, by Blanch Fentress, No. 1, $3.

Do., by Miss I J Holt, of Louisburg Female College, No. 2, $2.

Do., by Miss A S Yarborough, of do., No. 2, $2.

Do., by Miss J A Wood, of Raleigh Female Seminary, No. 2, $2.

An improved instrument for surveying and calculating Areas, by Col. James M. Lilly, of Staunton, Va. We mark "excellent," and recommend premium, $20.

An embroidered Table Cover, by Miss Lanie M. Croom, of Lenoir county, in her 14th year, we mark "excellent," and would recommend a premium, but it was handed in too late for regular entry, $3.

Case of Book-binding, by John H DeCarteret, Raleigh, we mark No. 2.

Set of crochet, Bead and Needle work, by the Blind, premium.

Pinebur Basket, by Miss S White, Raleigh, we mark No. 1.

"Goddess of Harvest"—Waxwork, No. 2

1 Velvet Hat, by Mrs S G Wilson, Granville, No. 2, $3.

Piece of French Rustic Furniture, by Miss Caroline Siev, Salem, very tasty, ingenious and useful, and well deserving an extra premium.

Embroidered box covers, in crape and silk, by Miss Augusta Hagan, Greensboro'—very handsome—No. 1.

Best Feather-work Cape, by Miss S G Wilson, Granville, $1.

2d best do. Victorine and Cuffs, by Mrs H Bobbit, Raleigh.

Jeans Coat and Pants, by Mrs S G Wilson, Granville, No. 2, $2.

3 Rolls Rush Window Curtains, by Mrs E H Borden, Newbern, we mark No. 1, and premium $3.

Large collection of N C Minerals and preserved Fish—rich and rare, by Prof E Emmons, worthy of most honorable mention.

Likewise a beautiful Aquariam of Fish, exhibited by Mrs F I Wilson, Raleigh.

Beautiful specimen of Candied Peaches, by Mrs. Means, Cabarrus, No. 1.

Ivory Needle Case, by W D Cooke, Raleigh. Honorable mention.

Largest collection of household fabrics, by Mrs S G Wilson, $7.

Rich and profuse collection of gold ore, by S J Christian, of Montgomery county, N. C., very extraordinary, and worthy of the highest consideration.

One stained glass Window, by T Cotes—beautiful.

House Veranda, Briggs & Dodd, Raleigh, No. 1.

Rolling Slat Blind, Circular Head, by Briggs & Dodd, No. 1.

Circular Head Window, by do. No. 1.

Large Window Sash, by Murdock, Darby, & Co., Salisbury, No. 1.

Sliding Door Architrave, by Briggs & Dodd, No. 1.

Drainage Plates, executed with pen—suited to Farm and City purposes, by Wm Percival, Raleigh. Very superior, and premium recommended of $4.

The Committee endeavored to embrace in this list everything not acted on by the other Committees.

It is quite possible some articles worthy of most honorable notice have been omitted.—If so, it was unintentional, and unavoidable, as previous Committees had failed to leave us any chart by which we might know what had or had not been examined.

### HORTICULTURE.

Large and splendid collection of Plants, Flowers, Exotics, &c., by Hamilton & Carter, Raleigh, is worthy of especial notice and handsome premium $10.

Grapes in jars and Vine with clusters.—Excellent, No. 1, by A C Hege, Lexington.

Beautiful collection of Apples—30 varieties; raised on trees of only three or four years planting, by W J Palmer, of Cherry Hill Farm, near Milton, N. C.

### MECHANIC'S HALL.

*Committee:* Gen C M Avery, S A McMannen, Needham Price.

One Husker, patented and exhibited by F M Walker, Greensboro', N. C. We recommend this machine to the favorable consideration of the Executive Committee, and we award him a premium of $5.

One Dumping Wagon, exhibited by E A Luphen, Ringold, New Jersey. This wagon we recommend to the farmers and award a premium of $5.

One specimen of Red Sand Stone, exhibited by Grier & McGowan, we award a premium of $5.

A specimen of Red Sand Stone, exhibited by Maunder & Campbell, from Orange county. Premium $5.

A lot of turned spoke timber for Carriages and Buggies, premium $5.

Also, one lot of bent timber, premium $5.

One Apple Cutter, exhibited by A S Lee

better, of Guilford county, N C., premium $2.

One Wheelbarrow, by W F Fort, premium $1.

One Plow, exhibited by R S Milton, combined subsoil and turning plow. We recommend this plow particularly to the attention of the farmers of North Carolina, and award a premium of $5.

There was also exhibited by Alexander Dickson a subsoil and turning plow, and we award him a premium of $3.

One set of Blacksmith Tools, exhibited by D S Richardson, of Weldon, N. C., weighing less than one ounce, premium $1.

One lot of Blacking manufactured in Fayetteville, N. C., exhibited by A J Woodward, we recommend this article to the public and award a premium of $2.

One lot farming Hoes, by D C Richardson, of Warrenton, N. C., premium $1.

One Tobacco Cultivator, by W B Williams, premium $2.

Also, one Jumping Colter, premium $1.

One Jumping Colter, by D B Richardson, premium $1.

One Marl and Dirt Elevator, exhibited by Mr Christman, of Wilson county, N. C., which we particularly recommend to persons engaged in raising marl, railroad contractors, well diggers, &c., and recommend that he be awarded a premium of $15.

## Meetings of the Agricultural Society.

An informal meeting was held in the Commons Hall, on Monday night, for the purpose of allowing persons to become members, and to appoint judges to award premiums. Nothing of interest transpired.

### TUESDAY NIGHT.

The Society met in Commons Hall, and were called to order by the President, Judge Ruffin, of Alamance.

Judge Ruffin gave notice that the election of officers would come off on to-morrow (Wednesday) night, and availed himself of the opportunity to decline a re-election on account of his age.

On motion of Dr. Crudup, a delegation of five, consisting of the following gentlemen, were appointed to attend the U. S. Fair, at Richmond: H. K. Burgwynn, Nicholas Williams, John S. Dancy, D. Hinton and J. Lewis.

Dr. Crudup, Major C L. Hinton, Dr. Wm. J. Hawkins, Gen. R. W. Haywood, and S. A. Hicks were appointed delegates to the Va. State Fair; and W. W. Whitaker, J. G. Long, W. S. Battle, R. H. Smith and J. L. Bridgers to the Seaboard Fair at Norfolk.

The following resolution was then introduced by Mr. Winslow, of Fayetteville, and unanimously carried—

*Resolved*—That the Executive Committee appoint one member of the Association from each county to procure Annual or Life members to the Society, to receive and receipt for their subscriptions, and forward them to the Treasurer.

Mr. Burgwynn offered the following resolution which, after some debate, was laid over until to-morrow night.

*Resolved*—That the Executive Committee take such means as to them shall seem fit to induce the Legislature, to grant such further aid to this Society, as the Legislature in its wisdom shall see proper.

The meeting then adjourned to Wednesday night.

### WEDNESDAY NIGHT.

The Society met at 7 1-2 o'clock, and was called to order by the President, Judge Ruffin, a very large number of delegates being in attendance.

A letter was laid before the Society by the President, from Mr. Jabez Smith, of Petersburg, Va., stating that he had sent as a present to the members of the society, a half bushel of Hungarian Grass Seed, and also a specimen of the grass. He gave a history of the seed, and clearly demonstrated that it will, if cultivated extensively, prove exceedingly beneficial to the farmer.

On motion, the seed were received and the secretary requested to return the thanks of the society to Mr. Smith for the donation.

On motion of Dr. E. A. Crudup, the number of delegates appointed to attend the meeting of the U. S. Agricultural Society, to be held in Richmond next week, was increased from five to seven, and the names of Dr. R. W. Lassiter, of Granville, and R. R. Bridgers, of Edgecombe, were added.

Gen. Winslow moved that we now go into the election of officers for the ensuing year, which motion was adopted.

Gov. Manly arose and addressed the Society in advocacy of the re-election of Judge Ruffin, as President, notwithstanding his wish to retire from the office, and before taking his seat proceeded to put the question, thus: All who are in favor of the re-election of Judge Thos. Ruffin, as President of this Society for the ensuing year, will say "aye." The ayes were loud and emphatic

Before Gov. Manly could call for the noes Judge Ruffin arose, and stated that he was too old and infirm to retain the office, and begged to be let off for one year, at least.

Gov. Manly without heeding this request proceeded to call for the noes to his proposition, to re-elect Judge Ruffin by acclamation, when not one no was heard.

Judge Ruffin then accepted the office for another year, but said he would do so on the express condition that Gov. Manly would promise not to attend the next meeting.

The President stated that a letter had been received from Dr. Wm. R. Holt, one of the Vice-Presidents of the Society, assigning as a reason for not attending the present annual meeting, that he was then following home the remains of a beloved son who had died at Chapel Hill.

The President also stated that the absence of Mr. R. H. Smith, another of the Vice-Presidents, was on account of sickness; and that Gov. Graham was out of the State, which accounted for his absence.

Mr. W. W. Whitaker suggested that, as it was probable that Gov. Graham would have business which would call him from the State every year about the time of the meeting of the Society, it would be proper to substitute some other gentleman in his place as Vice-President, and suggested the name of Mr. H. K. Burgwynn. Mr. B. declined, and Dr. J. E. Williamson, of Caswell, was nominated.

On motion, the Society then proceeded to the election of Vice-Presidents, and as only one was put in nomination for each office, the vote was taken *viva voce*, when all of the old Vice-Presidents, except Gov. Graham, were re-elected, as follows: 1st Vice-President, R. H. Smith, of Halifax Co.; 2nd J. S. Dancy, of Edgecombe; 3d, Dr. Wm. R. Holt, of Davidson; 4th, Dr. J. E. Williamson, of Caswell, All were elected unanimously,

Mr. J. F. Hutchins was then re-elected Treasurer, and Mr. John H. Bryan, Secretary of the Society.

The resolution offered by Mr. Burgwynn last night, was then called up, and after being discussed at some length, by Messrs. Lewis, Stafford, Winslow, Ruffin, Crudup, Whitaker and Burgwynn, was adopted unanimously.

On motion, the Society adjourned.

---

### THURSDAY NIGHT.

Society was called to order about 7½ o'clock, the President, Judge Ruffin, in the Chair, John H. Bryan, Jr., Secretary. The attendance to-night was not large by any means.

The President announced that he had appointed the following Committees:

*Executive Committee.*—John S. Dancy, of Edgecombe; R. H. Smith, of Halifax; Dr. Wm. J. Hawkins, Warren; Wm. A. Eaton, of Granville; Charles L. Hinton, William R. Pool, and William H. Jones, of Wake; W. R. Holt, of Davidson, and Dr. Jas. E. Williamson, of Caswell.

*Committee to select a Speaker at the next Fair.*—R. H. Smith, H. K. Burgwyn, and R. R. Bridgers.

*Committee to Audit and Settle the Treasurer's Account.*—D. W. Courts, Charles L. Hinton, and W. W. Whitaker.

Col. E. P. Jones, of Caswell, was appointed Chief Marshal for 1859.

Gen. Winslow desired the Secretary to inform the Society how the number of members this year compared with the number enrolled last year.

The Secretary stated that the number of badges sold in 1857 was 574 and 1858 (the present Fair) 680. He also stated that $900 were taken in the gate, from persons who were not connected with the Society, on Thursday.

The Secretary then, at the request of the President, read a clear and able report from Mr. S. W. Westbrook, one of the Delegates appointed at the last meeting of the Society to attend the meeting of the National Pomological Society held in New York in August last. Mr. W. urged Southern men to encourage fruit raising in the South, as the climate was better adapted to [illegible] more Northern latitudes, and gave it as his [illegible]ion that if Southern men would take hold of the matter in a proper spirit, the Southern fruit would eventually drive the Northern fruit out of their own markets.

Mr. Burgwyn moved that the report be received.

Gen. Winslow, in seconding the motion, spoke in highly complimentary terms of Mr. Westbrook, and proposed to amend the motion so as to return the thanks of the Society to Mr. Westbrook for his able report.

Prof. Emmons made a speech testifying to the admirable adaptation of the climate of North Carolina to the raising of fruit, saying that North Carolina was better adapted to that purpose than any other State in the Union. He also recommended the extensive culture of the grape in this State.

Other gentlemen also spoke on the subject, when the report was received and the thanks of the Society returned to Mr. Westbrook.

Mr. Dancy moved to appoint five delegates to the Pomological Convention which is to assemble in Charlotte on the 4th of November for the purpose of organizing a Pomological Society.

The motion was adopted, and the President appointed the following gentlemen delegates, viz: Messrs. S. W. Westbrook, G. W. Johnson, Joshua Lindley, Daniel Asbury and J. B. Zollicoffer.

On motion of Dr. E. A. Crudup, the thanks of the Society were returned to Hon. Thos. L. Clingman for the able address he delivered before the Society this day, and a copy of the Address was requested for publication among the proceedings of the Society.

On motion of Mr. R. S. Tucker, the thanks of the Society were returned to the ladies for their assistance in arranging and attending to the articles on exhibition in Floral Hall.

On motion, the Society adjourned.

FRIDAY NIGHT.

The attendance this evening was small.

The President announced the following *Assistant Marshals.*—Maj. J. M. Crenshaw, Wake; J. J. Ferrell, Wake; Haywood Griffice, Wake; David Lewis, Wake; Albert Hinton, Wake; Jasper Fleming, Caswell.

The sureties on the Treasurer's bond were accepted.

In answer to Dr. Crudup, the President stated that a committee had examined the treasurer's accounts and found all correct.—The failure to lay the journal of the Executive Committee before the Society this year was caused by a change in the office of secretary to that committee, and the inability of the present secretary to get possession of all the papers belonging to the Society till very recently. He also stated that the receipts of the Society this year would amount to about $3,000—some $200 to $300 more than last year.

The president announced that, in consequence of Mr. R. H. Smith being unable to attend to the duties, Mr. F. Fries had been substituted for him.

Dr. Crudup submitted the following case to the Society, by request, and asked for an explanation: A contributor to the present Fair had a plow to which was awarded the premium in a contest with "all competitors." The same plow was subsequently awarded the premium in a contest amongst "plows made in the State." It was ruled by the Executive Committee that the owner was entitled to but one premium.

The president said no one article could take two premiums—they would make the list quite definite for the future.

The business of the meeting being now completed, the Society adjourned till next October.

# Horticulture.

S. W. WESTBROOK, EDITOR.

## Fall against Spring

FOR TRANSPLANTING FRUIT TREES.

An erroneous impression has been made upon the public mind, that Spring was the proper time to transplant Fruit Trees. And how it was that such an erroneous practice should obtain such patronage and favor we cannot imagine, unless it has been through the force of example. Our fathers transplanted in the spring, and what father and grandfather have done of course is right and any innovation upon their practice is entirely unpardonable. And such is the force of practical and traditional error that it invariably arrays itself in opposition to almost every improvement or discovery without any tenable reason to sustain it, thereby doing an incalculable amount of injury to almost every useful enterprise. At this point, however, we would say that it is not our purpose to wage a general warfare against fogyism wherever found. If it were, we should have to arm ourselves in a more formidable panoply than did the veritable Jesse Holmes, the fool killer, when he started out on his mission, and although the subjects of his warfare were, and are yet, very numerous, yet we think that the votaries of fogyism are much more so. And we are of the opinion that in order to achieve a victory, that we should have to employ a large number of journeyman soldiers to assist us, and the probability is that after a great deal of hard fighing that there would be still a large surplus left that would do to turn over to Jesse. But to the question: Why should fruit trees be transplanted during the fall season?* In answer we would say, that it is only necessary for any person of ordinary intelligence to spare a few moments with us while we open the beautiful book of nature, made and stereotyped by the great Maker of all things, which should be our preceptor in matters pertaining to nature, (and it would be a happy thing for us all if we would study nature more, then it would not be such an easy matter for such dangerous and erroneous opinions to obtain favor among an intelligent and thinking people.). Now while we are unfolding its golden leaves, all perceive that certain laws are indellibly written on its pages, and that a violation of these laws are sure to be rewarded with a penalty according to the magnitude of the offence. In vegetable physiology we perceive two prominent points in her economy that exercise a semi-annual influence upon all deciduous trees. The first of these that we allude to, is the time that they put on their vernal dress, and the other is the time of defoliation. At this time the tree becomes torpid, and consequently is inactive in all its parts; the work of the season has been brought to a close; the fruit, leaves and wood have been matured, and the tree is at perfect rest from all labor. Now, if a tree is transplanted as soon as it sheds its leaves, it will be seen on examination that the ends of the roots (where they have been trained when the tree was taken up) make no effort to heal the wounds in less time than four or five weeks, and sometimes longer. And here we appeal lo the opinion of some of the best physiologists and practical nurserymen who have handled trees at all times during the fall, winter and spring, from the time of defoliation until they put on their vernal dress again, if the above assertion is not so. Now, If such a law in deciduous trees is a fixed principle, then may not all infer that the time that trees are in a dormant state is the time designed by nature that they should be taken up and transferred to their new abode. Now let us see what effect it has upon trees planted at different periods during the fall, winter and spring. As we have before asserted, reaction takes place again in four or five weeks after defoliation, and if a tree has been transplanted during the time of rest, it will be observed by careful examination in December, January, February, March and April, that the tree has made new white thread-like roots in length in proportion to the time that the tree has been transplanted.

Now what is the character of the testimony adduced by this mysterious law in nature? It must be this (and it it is as clear as a sun-beam) that there is a proper time to plant. And if the thread-like roots of trees transplanted during the last half of October and the months of November and December, are longer by the last of April than those planted after Christmas (which some persons who claim to have some knowledge on the subject say is the proper time to transplant,) then we must arrive at the conclusion that they are in error, and that such error is calculated to do great injury, from the fact as above shown that part of the time required for the reparation of the roots where they have been mutilated by raising them from the ground, is lost, and all the process of healing has to be performed after Christmas that would have been done prior to that time, namely: first, cecritization; secondly, granulation; and thirdly, the emission of roots. And if transplanting is delayed until March or April, then the process of healing and the emission of roots has to take place when the tree is most in need of them to perform their functions in taking up the necessary elements from the soil which are calculated to give the tree a natural impulse, and aid it in putting on its spring garb at the natural season. And if the weather is dry in the spring, the process of healing is very tedious, which must take place before the tree can grow. Hence, we often see trees that have been transplanted in the spring remain without foliage until June and July. And if a drought should occur during the summer, many die because their roots have not had time to heal in the spring and make a sufficient amount of roots to support the plant during the drought of summer, and the result is that thousands perish.

---

* We solicit gentlemen who may entertain contrary opinions to ourselves on the subject of transplanting, to favor us with their opinions through the columns of the Planter.—If we are in error we wish to be convinced of the fact, for we have long since learned that by bringing sentiment in contact with sentiment very often light is elicited thereby.

◆

☞ A number of articles intended for this issue have been crowded out by the account of the Fair, &c.

## SCIENTIFIC AMERICAN.

### PROSPECTUS.

*Volume Fourteen begins September* 11, 1858.

### MECHANICS, INVENTORS, MANUFACTURERS AND FARMERS.

The *Scientific American* has now reached its fourteenth year, and will enter upon a new volume on the 11th of September. It is the only weekly publication of the kind now issued in this country, and it has a very extensive circulation in all the States of the Union. It is not, as some might suppose from its title, a dry, abstruse work on technical science; on the contrary, it so deals with the great events going on in the scientific, mechanical and industrial worlds, as to please and instruct every one. If the mechanic or artizan wishes to know the best machine in use, or how to make any substance employed in his business—if the Housewife wishes to get a recipe for making a good color, &c.—if the Inventor wishes to know what is going on in the way of improvements—if the Manufacturer wishes to keep posted with the times, and to employ the best facilities in his business—if the Man of Leisure and Study wishes to keep himself familiar with the progress made in the chemical laboratory, or in the construction of telegraphs, steamships, rail roads, reapers, mowers, and a thousand other machines and appliances, both of peace and war—all these *desiderata* can be found in the *Scientific American*, and *not elsewhere*. They are here presented in a reliable and interesting form, adapted to the comprehension of minds unlearned in the higher branches of science and art.

—

TERMS:—One copy, One Year, $2; One Copy, Six Months, $1; Five Copies, Six Months, $4; Ten Copies, Six Months, $8; Ten Copies, Twelve Months, $15; Fifteen Copies, Twelve months, $22; Twenty Copies, Twelve Months, $28, in advance.

Specimen copies sent gratuitously for inspection. Southern or Western money, or Postage Stamps, taken for subscriptions.

☞ Letters should be directed to

MUNN & CO., 128, Fulton St., N. Y.

Messrs. Munn & Co. are extensively engaged in procuring patents for new inventions, and will advise inventors, without charge, in regard to the novelty of their improvements.

Sept. 1, 1858. 9

## W. W. DINGEE, & CO.,

### YORK, PA.

MANUFACTURE the following machinery, which will be delivered in Baltimore at the prices named.

| | |
|---|---|
| An 8 horse power, including thresher and separator, | $165 00 |
| A 4 horse power, including thresher and separator, | 150 00 |
| A 2 horse railway power, including thresher and separater, | 145 00 |
| A 1 horse railway power with thresher, | 125 00 |
| A fan that will clean grain at once running through, | 25 00 |
| A grain drill with grass seed-sower attached, | 75 00 |
| 2 or 3 roller sugar-mills, with iron frames, | $45 & 65 00 |

For cuts of machines and full descriptions, write to W. W. DINGEE, & Co.,

[6—6t.] York, Pa

I OFFER AT PRIVATE SALE A TRACT OF LAND consisting of 230 acres, near the town of Lexington and within one mile of the Depot, with a good dirt Turnpike Public Road leading to the Main Street, 25 or 30 acres of which is the richest Branch bottoms, with a deep and capacious ditch to carry off surplus waters, and most of it in grass for grazing and mowing; upwards of 50 acres are in the heaviest white-oak, red-oak and hickory timber. The rock are Trap and Greenstone, the soil a dark clay loam, and of excellent quality. It has on it numerous Springs of the best water, and is of the best quality for Wheat, Tobacco and Grass, and is capable of being made a superior Farm.

Also, a Tract of 200 acres, lying two miles East of Lexington Depot, through which also runs a public road. This consists entirely of wood land, pine, oak and hickory. It is within a half a mile of a Saw Mill on Abbott's creek, with an excellent road to the Saw Mill. The timber is of excellent quality and the soil a good sandy loam, will make a good Farm, and is considered of excellent quality for Tobacco. The prices asked for these lands, considering their convenient distance to a Railroad Depot, must offer great inducements to purchasers.

W. R. HOLT.

Lexington, N. C., August 1858. 8—4t.

# PROSPECTUS

OF THE

# "North Carolina Planter."

The present is the eleventh number of this Agricultural Periodical. At the solicitation and recommendation of many friends, we present it in a new dress and on superior paper. It now presents as handsome an appearance as any of its cotemporaries, and is filled with matter of more interest and importance to the Planters of North Carolina, than any other publication in the country.

The NORTH CAROLINA PLANTER appeals to the patriotism and State pride of all her sons for support—devoted as it is to all the industrial interests of North Carolina. The Publisher has gone to heavy expense to issue his Magazine in the best style, and confidently relies upon his fellow-citizens to award a generous and liberal support to his enterprise.

Will they do it ?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication !

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ Postmasters and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
Raleigh, N. C.

November, 1858.

DECEMBER NUMBER, 1858.

# NORTH CAROLINA PLANTER.

A MONTHLY

## Southern Agricultural Journal:

DEVOTED TO

THE IMPROVEMENT OF SOUTHERN FARMING, HORTICULTURE,
FLORICULTURE, AND THE DOMESTIC AND MECHANIC ARTS.

EDITED BY A CORPS OF PRACTICAL FARMERS.
S. W. WESTBROOK, HORTICULTURAL EDITOR.
W. H. HAMILTON, FLORICULTURAL EDITOR.

A. M. GORMAN, Publisher, Raleigh, N. C.
TO WHOM ALL COMMUNICATIONS MUST BE ADDRESSED.

## 300.000 No. 1. Fruit Trees for Sale

**WESTBROOK & MENDENHALL,**

*Proprietors of the West Green Nurseries and Gardens near Greensboro', N. C.*

WOULD very respectfully call the attention of the citizens of the Southern States to their very large stock, of native and acclimated Fruit Trees for the Fall and Winter Trade both wholesale and retail.

This large and handsome assortment has been propagated from thrifty leaving trees and worked upon the best seedling stocks, which is a sure guarantee of fruitfulness and longevity, two prominent characteristics which should not be overlooked by persons wishing to plant orchards either for marketing or family use. The stock consists of the following trees:

150,000 Apple Trees.
100,000 Peach "
16,000 Pear "
12,000 Apricots "
10,000 Cherry "
12,000 Plum "
5,000 Nectarine "
1,000 Almond "
4,000 Grape-vines.

Besides, a very fine assortment of Currents, Strawberries, Raspberries, Gooseberries, etc., all of which will be sold on very reasonable terms for cash, or upon short time to punctual customers, who will be required to give a note on the delivery or reception of the trees at the place designated in the order, or they will be charged with interest from the date thereof.

All packages put up in superior style and a complete invoice sent to each patron and so arranged that the invoice will be the register of the orchard after the trees are transplanted, if they are planted in succession as each kind appears on the list.

September 1, 1858. 2—

---

## A. H. C. BROCKEN,

## 22 CLIFF STREET, NEW YORK.

MAUFACTURES OF

**GLASS SYRINGES, HOMŒOPATHIC VIALS, GRADUATED MEASURES, NURSING BOTTLES, ETC.**

Glass Ware for Chemists, Druggists, Perfumers, Photographs, etc. Green Glass Ware by the package. A liberal discount made to the trade. Orders from Country Druggists and Dealers solicited. Price Lists sent on application.

October, 1858. 10—3m.

---

## TOWN PROPERTY.

A Citizen of Raleigh who owns more Town Property than he desires to hold, *will sell at a great bargain*, some of his Houses and Lots, some of which are very desirable both in location and kind. Terms very easy. For further information, apply to the Editor of the Spirit of the Age.

---

## FOR ONLY $1.

ON the receipt of $1, will be mailed to any person a recipe of a remedy for Horses, while suffering with Botts or Grubs, which was never known to fail to give ease in their greatest agony, if given in time. Many valuable horses have been saved from an untimely death by this remedy, and if given as advised, and it fails, the money will be refunded. No person who has a horse should be without this recipe. Other remedies will be added, which will be conducive to health and thrift, and a great preventive of distemper, which horses are subject to. Address R. M. BROWN, the P. M. of New Hill P. O., Wake county, N. C.

March 2, 1857. 51—3m

---

## Read ! Read ! the following :

We the undersigned have used and known used the Receipt advertised by Robt. M. Brown, Esq. for the cure of Bots or Grubs in horses, and consider it the best remedy known, for that disease. Indeed, we have never known it fail giving relief in the very first instance, even when horses were suffering the severest agony. And the remedy is quick and effectual. For the benefit of every body, and especially for the benefit of that noble animal—the Horse—we recommend all to procure this valuable Receipt. We have known Mr. R M. Brown's remedy to be used in very many instances, and never without effect. In some case it has accomplished astonishing cures.

J. L. BENNETT, T. B. HOLLEMAN,
P. R. JONES, JOHN BENNETT,
EDWIN HOLLEMAN, of Wake County.
JOHN R. WARD, A. P. STROUD,
D. M. DURHAM, of Orange County, N. C.
JOHN C. BURGESS, WM. H. BURGESS.
Randolph County. N. C

---

## NORTH CAROLINA FORM-BOOK.

THIS day published by H. D. TURNER, a new and complete Edition of the NORTH-CAROLINA FORM-BOOK, Improved and greatly enlarged, containing three hundred and forty-four pages, Royal 12 mo., embracing many forms not found in former Editions. Printed on good paper, and substantially bound in Law calf. It contains "Forms" of all those Legal Instruments which people have occasion to use—and furnishing also a Guide to Justices of the Peace, Sheriffs, Clerks, Constables, Coroners, School Committees, &c., &c. Compiled from the best sources, being an improvement on all works of the kind formerly in use, and intended as a companion to "CANTWELL'S JUSTICE." To which are added the Constitution of North-Carolina and of the United States, an account of the principal Officers of the State and of the Counties, titles of Address, &c., &c. Furnished at the unparallelled low price of One Dollar, (being the cheapest book ever offered for sale.) When sent by mail, an extra charge of 19 cents will be required, to cover Postage. A liberal discount to those who buy to sell again.

Published and sold wholesale and retail, by H. D. Turner, at the North Carolina Book Store; and by J. B. Lippincott & Co., and Hayes & Zell, Philadelphia; and by A. S. Barnes & Co., New York.

Raleigh, April 17, 1858. 34—

# THE NORTH-CAROLINA PLANTER.

Devoted to Agriculture, Horticulture, and the Mechanic Arts.

VOL. 1. RALEIGH, N. C., DECEMBER, 1858. NO. 12.

*For the N. C. Planter.*

Mr. Editor:—I do not propose writing anything for the Planter that will either be instructive or amusing to men of experience, but only propose saying some things on the general subject of farming, which may be useful (if heeded) to a class of farmers who are just commencing agricultural operations. Although I have been engaged in husbandry for nearly forty years, yet I do not profess to understand the science of agriculture as well as *some* who are mere tyros in this first and most important avocation of life. There are many things I have learned both from observation and experience, that I did not know in the outset of my farming. We will suppose that you have just commenced farming, and that you are by no means an adept in your business. Well, I have passed through this stage of the business—and let me advise you to commence *right*, if possible.—If you have houses to erect, study, or have an eye to economy, taste and convenience. Endeavor to arrange your buildings so that you will not afterwards wish you had made a different arrangement. Consult men of intelligence and experience, and weigh well everything that men of experience may suggest. Have you land to clear, select such (if you have it) as is not only the most level, but is most productive. It is not probable you will have much land at first to spare for small grain, and broken land, unless often changed, or very judiciously cultivated, will soon be swept away by heavy washing rains. If you have to commence farming on old land that needs to be improved, go to work at once and make all the manure you can, and apply to your lands as judiciously as possible. Never cultivate poor land only as a matter of dire necessity. "Plough deep, while sluggards sleep, and you will have corn both to sell and to keep." Never suffer anything to be done on your farm either carelessly or indifferently. "If anything is worth doing at all, it is worth doing well. Let this be your motto in everything. Never allow yourself to believe that you know more about farming than those whose experience have taught them many things they could not learn in any other way. You may learn something that may be valuable even from a negro. Never work with poor tools, if you are able to purchase good ones, as good work cannot be done with poor tools—besides, you will have to labor much harder, as well as accomplish less work. *Get good tools, and take good care of them!* Never suffer your fences to get into such bad order as to tempt either your own stock or your neighbor's to break into your fields. This is bad policy any way you can view it. It often causes neighbors to fall out, and engage in litigation, and before the difficulty is settled, you will both be heartily tired of it, and the money and time spent would more than have made your fences lawful. I would advise you to procure good stock to start with. A poor scrubby horse, cow or hog, will generally eat as much, and require as much attention as improved stock will, and not be near so valuable—besides, the looks is something worthy of your attention. A common error with many persons just commencing business, is, that they begin on too large a scale, and thereby involve themselves in debt, and this will in some measure cripple your energies and efforts to make improvements. Begin on a scale that will consist with your means, and as you become able, extend your operations. It is the greatest folly in the world to "*start rich and die poor.*" And I may just as well now, as at any other time, advise you to start in the world without the bottle. You will soon find that your corn and cotton and wheat will grow without liquor, and that you can cut your wheat, and husk your corn, and pick your cotton without a jug of whiskey; I have done it, and can do it again.

Never allow yourself to "keep bachelor's hall" any longer than you are obliged to do so. Old father Adam could not get along well without an help-meet, neither can you.—You may *breathe* awhile, but you cannot *live* as a man ought to live, while you are merely *rubbing along and taking it "dry so.*" I do not entertain the idea for a moment, that because you are a farmer, you may not and cannot be a "great man." Some of the greatest and best men that ever lived, were tillers of the soil, and what others have been, you may become, by improving every opportunity for moral and mental culture. I would also counsel every farmer to read and study, not only "*books*, but *men.*"—You may learn much by studying human nature. The great book of nature is always spread out before you. Study it well, and it will lead your thoughts up through Nature to Nature's God." Remember, every man who plows and hoes, does not deserve the dignified name of Farmer; but only such as are successful in their avocation. There are pettifoggers in law, quacks in medicine, and cobblers among shoe-makers.

Laziness is a great hindrance to some men who engage in the business of farming. The best plans will avail but little, if they are not carried into execution. You will find, that to stop a hole in your fence, which may only be the work of a minute, may save you much trouble, as well as much corn. Remember that money and time are both valuable; therefore, make a wise use of them. Finally, remember that you are a creature of God, dependent on Him for every "breath you draw, and every beating pulse you tell," as well as for health, and rain, and sunshine, which are necessary to enable you to succeed in the profession of your choice.

I would by all means advise you to take some Agricultural Paper, and as the North Carolina Planter is an excellent Periodical, why not just as well take it, especially if you live in the good old "North State." R.

Reedy Creek, S. C., Oct., '58.

*To the Editor of the N. C. Planter:*

Born and raised in North Carolina, I cultivate for her, as my *Alma Mater*, for her institutions, enterprises and enterprising men, the dearest feelings —feelings which were implanted in my little heart (ah! as big an one as ever throbbed in a manly bosom) at the knees of one of the kindest of mothers. I often see many and loud calls that you, as one of her bold and active sons, make for the Journal which you have recently commenced. You say that the life of the Journal depends upon whether you get *two thousand subscribers by the first of January next*. Now, Mr. Gorman, I am rather inclined to think when you made that call that you had nothing else to write about; that you have publicly and grossly slandered the North Carolina farmers, by saying that an Agricultural Journal must sink for the want of two thousand subscribers at the paltry sum of *one dollar* apiece. Now, in fact, hav'nt you already enrolled upon your list more than five thousand subscribers? Is there a man—a *farmer*, in North Carolina, that makes 50 barrels of corn and 100 bushels of wheat, that will not pay *two cents* a week for the rich instruction of an Agricultural Journal, the contents of *one single* number of which might, and in all probability would, disclose the hidden treasures of his fertile soil, which he might plow over for years, even ages, and then die ignorant of. If there be such a farmer in North Carolina, may a cloud of shame lower over his brow; may his cake be made next year of cheat; may his straw bed be of horse nettles; in fine, may he have a plentiful crop of wild onions, broom sedge and "bone-set." Would that the farmers of middle North Carolina would take a trip through the Palmetto State, and learn how far they are behind her farmers in agriculture; and learn their great success may be attributed to the fact, that they are reading as well as working men. The gentleman for whom I enclose you one dollar for the N. C. Planter, to begin with the present month, said to me that he often got the worth of his subscription from reading one article. Hoping soon to hear that your Journal has found its way to the home of every farmer in the "Old North State," I will close, by saying that I will endeavor to send you a list of subscribers as soon as I can steal opportunity from my confining avocation to "ride around" among our enterprising farmers. Very respectfully,

W. J. W. KERALL.

*For the N. C. Planter.*

## New Agricultural Club.

Wake Forest, Nov., 1858.

Mr. Gorman:—*Dear Sir*—A portion of the citizens of Wake Forest having assembled at Forestville, for the purpose of forming an Agricultural Club, the meeting was organized by calling George B. Allen to the Chair, and appointing Priestly H. Mangum as Secretary. A motion was made and carried that a committee of three be appointed to draw up rules for the regulation of the Club. Anderson Hicks, Job Carver and Junius Fort being appointed on that committee, submitted the following resolutions, which were unanimously adopted:

Resolved, That we, the undersigned, do mutually agree to form ourselves into a body, to be called the Wake Forest Agricultural Club—the chief object of which shall be to improve our lands, our mode of cultivating them, our stock, &c.; also, to encourge social intercourse and good feeling among its members.

Resolved, That the Club shall consist of not more than twelve members, two-thirds of whom shall be necessary to form a quorum for the transaction of business, and a majority of the members present at a regular meeting shall be competent to elect its officers, and decide all questions that may come before them, when not inconsistent with an express provision of this instrument.

Resolved, That there shall be chosen annually, by ballot, from our number, a President, whose duty it shall be to preside over our deliberations and preserve order during the same; also two Vice Presidents, whose duty it shall be to preside in the absence of the President, and a Secretary, whose duty it shall be to record the proceedings of the Club, and to correspond with such other Clubs or persons as in the opinion of the members of this Club its interest may requre.

Resolved, That whenever in the unanimous opinion of the members present at a regular meeting it shall become necessary to incur any expense, the President shall have power to levy a tax equally on all the members of the Club, sufficient to defray the same, and in such case, the Secretary shall collect the money and pay it out as directed by the Club, and record his receipts for the same.

Resolved, That the Club shall meet monthly, at the residence of one of its members, beginning with the senior in age, and go through in regular succession, and make a thorough examination of the farm, the mode of operations, the stock, farming implements, &c. It shall be the privilege of each member to suggest any alterations and improvements as he thinks would advance the interest of the proprietor, which shall be done in a respectful manner, and to which no exception shall be taken.

Resolved, That it shall be the duty of the President to call the Club to order at some time during the day of each regular meeting, for the transaction of such business as may come before it, and it shall be the duty of each member to attend such meetings promptly, when he can do so without serious inconvenience.

Resolved, That the Club shall have power to expel any of its memhers, whenever in the opinion of two-thirds of its members its best interests require such expulsion.

Resolved, That any amendment or alteration of the rules, shall require a vote of two-thirds of all the members of the Club.

Resolved, That all the members of the Club shall be required to sign these rules, thereby pledging themselves to a strict compliance of each provision.

The following gentlemen signed, as members of the Club:

John Green, Job Carver, George B. Allen, J. J. P. Penell, J. A. Hicks, John R. Dunn, W. D. Jones, James B. Dunn, J. W. Fort, W. B. Dunn, Jr., P. H. Mangum, F. M. Purifoy.

At a recent meeting of the Club the following was passed:

Resolved, That the Secretary be required to inform the Publisher of the North Carolina Planter of the establishment of the Club, and to request him to publish the regulations of the same.

GEO. B. ALLEN, Ch'n.
P. H. MANGUM, Sec'y.

*For the N. C. Planter.*

## The "Argyle Pea."

A NEW FOOD FOR HOGS.

*Mr. Editor:*—In my rambles, having lately stumbled upon a product of the soil which seems to be entirely new, I present you with a notice of it, and at the earliest opportunity shall place in your hands some of the peas. I have named it the "Argyle Pea," in honor of the land of its birth.—The person from whom I obtained mine stated that the person who gave them to him was an old Scotch lady, a sort of fortune teller, who said she brought them from Scotland. The fruit grows like the ground-pea at the root, is perfectly round and has a thick juicy rind around it. It seems, in fact, to be a sort of cross between the ground pea and the common black-eye pea. I have eaten them roasted, and the taste is similar to that pea. Hogs eat them with great eagerness, and it is as food for them that I think they can be made most profitable. It is at any rate worth a trial. The top is small, but the product at the root is very great—one vine producing from 50 to 100 peas. It will grow anywhere, but I think flourishes best in sandy soils.

You are at liberty to give my name and address to any one wishing to know where they can obtain the pea. H.

TRANSPLANTING EVERGREEN TREES.—The great and only secret in transplanting evergreen trees, and having them grow as well as deciduous trees, is to recollect that they are always in leaf, and therefore always exhausting the root, and therefore the root must never dry. If this is remembered, and at the same time common sense enough used to know what dry is—for one hour of open exposure to a drying wind will often destroy an evergreen—then there will be no trouble in transplanting evergreens. April and May are the best months for the work, but it can be done successfully in any month, except June and July.

*For the N. C. Planter.*

## Sampson County Agricultural Society

*Messrs. Editors:* You will please insert in your paper the following list of Committees, and oblige the Sampson County Agricultural Society:

The following Committees were recently appointed by the Sampson County Agricultural Society, to serve at the ensuing Fair, to be held on the first Thursday in December, 1858:

HAYWOOD BOYKIN, ESQ., Chief Marshal.

*On Field Crops.*—Curtis Thompson, John C. Williams, A. N. Matthis.

*Sample Crops.*—P. Murphy, Murdoc White, Jno. A. Oates.

*Single Specimens.*—John R. Ezzell, Jas. H. Stephens, Isaac C. Wright.

*Cattle.*—William Ashford, Allen Williamson, E. F. Shaw.

*Fat Cattle and Work Oxen.*—H. E. Carr, R. F. Boykin, Wm. Williamson.

*First Class Horses.*—Thomas E. Faison, James King, W. C. Draughon.

*Jacks, Jennets and Mules.*—Jas. C. Williams, Alworth King, R. P. Matthis.

*Sheep.*—O. P. White, Jno. C. Wright, A. Hobbs, Jr.

*Dairy and Bees.*—Jno. R. Beaman, Mrs. R. C. Holmes, Mrs. C. H. Stevens.

*Household Department.*—Dr. W. G. Micks, Mrs. Alfred Johnson, Mrs. Wm. A. Faison.

*Domestic Manufactures.*—R. A. Moseley, Mrs. Wm. Ashford, Miss S. J. Underwood.

*North Carolina Manufactures.*—Jas. C. Holmes, George W. Hobbs, John W. Brown.

*Swine.*—B. Hargrove, Elias Faison, Wm. H. Smith.

*Poultry.*—E. L. Faison, C. H. Stevens, J. H. Robinson.

*Pork and Bacon.*—Isham Royal, John C. Hines, Dr. Allmand Holmes.

*Fruits and Horticulture.*—Dr. Henry A. Bizzell, David A. Thompson, Simon P. Hobbs.

*Mechanical premiums.*—Thos. M. Lee, Jas. Armstrong, B. R. Hood.

*Manufactures in Wood and Iron.*—Dr. C. T. Murphy, Thos. L. Pugh, L. A. Powell.

*Patch Work.*—James M. Moseley, Miss Eliza Fryar, Miss Kate E. Wright.

*Embroidery and Worsted Work.*—Luke C. Graves, Mrs. E. J. Beatty, Miss L. A. Norton.

*Fine Arts.*—W. F. Stradella, Mrs. Amelia McDugald, Mrs. W. F. Stradella.

*Equestrian Performance.*—Wm. S. Devane, M. J. Faison, Thos. H. Holmes.

*Experiments and Essays.*—Dr. Wm. I Thompson, R. R. Bell, Thos. H. Williams.

*Discretionary Premiums.*—Wm. H. Herring, Robert Murphy, Nehemiah Faison.

*Trotting and Pacing Horses.*—Owen Holmes, Thomas Moore, James S. Hines.

Editors are respectfully invited to attend.

ISAAC BOYKIN, Secretary.

Clinton, N. C., Oct. 4th, 1858.

*From the Fayetteville Observer*

## The Yaupon Tea.

It is a singular coincidence that on yesterday we received from two different and distant sources, interesting accounts of the Yaupon tree of Eastern North Carolina, both identifying it with the *Ilex Paraguayensis*, or *Mate* plant of Brazil, a plant of great commercial value there, but which has been suffered, like too many other valuable things, to "waste its sweetness on the desert air" in North Carolina.

In the morning of yesterday the Raleigh Standard brought a very well written article from H. E. C., (Henry E. Colton,) of Asheborough, who, noticing a statement that "one object of the Paraguay expedition is to introduce into the country the *Mate* or Paraguay Tea, in other words the prepared leaf of the *Ilex Paraguayensis*," proceeds to show, as he does most conclusively, that it is identical with the *Yopon* of our State.

In the afternoon of yesterday we received the 2d volume of Dr. Hawks' History of North Carolina, where in the chapter on "Agriculture and Industrial Arts," pages 219–20–21, is the same evidence, which, however, Dr. Hawks found in a valuable work, recently published, entitled "Brazil and the Brazilians," by the Rev. Dr. Kidder and the Rev. Mr. Fletcher.—Mr. Colton obtained most of his facts from the Journal of Commerce, of 1856, to which paper it was evidently furnished by one of the authors of "Brazil and the Brazilians."

Dr. Hawks was perfectly familiar with the plant and the tea during his early life in the eastern part of the State; and Mr. Colton became so during his residence at Edenton a few years ago, and both are aware of the high estimation in which the Yaupon, as Lawson called it, or Yopon, as it is now called, is held. Mr. Colton heard of a good old lady who said that it had kept her out of heaven for twenty-five years. He has himself known remarkable cases of its beneficial effects. It calms the restless and excites the torpid. It possesses almost miraculous powers as an invigorant of the wasted system. Many captains of vessels on our coast prefer a supply of it to coffee, as they say their men are with it able to endure more fatigue and accomplish more labor.

Mr. Colton concludes his interesting communication as follows:

"It grows wild upon our eastern coast, but when cultivated and trimmed, makes a beautiful tree. I have been told that there are several trees in this (Randolph) county, but have never seen them. A gentleman not long since informed me that it was grown in New Orleans as a hedge tree. Quantities of it are sold throughout the eastern part of this State and Virginia. It retails in the markets of Edenton, Elizabeth City and Plymouth at from 50 to 75 cents per bushel. This, however, is the roughly prepared stuff. I have no doubt should some pains be taken to prepare it and bring it before the public, it might be made a valuable article of commerce. And now, with these facts in the light, it seems to me to be a useless business for the United States to begin to import that of which she has a sufficiency to export.

"The writer in the Journal of Commerce closes his article as follows: "I hope that this little communication may come under the eye of some North Carolina gentleman, who has a turn for such matters, and will give an examination of the bearing *Ilex*, which is found in his State, and which has so long furnished a beverage to some of the eastern people." Without being anything of a botanist, but ever having the interest of his State at heart, your humble correspondent took upon himself the task, and in the fall of 1856, on returning from the East, brought with him to the State Fair a package for exhibition, and also a package for each of the editorial fraternity of the city of Raleigh, intending to accompany it with a communication to the State Agricultural Society, giving all the information within his reach concerning it. But amidst the confusion at the depot, the article of baggage containing the communication was lost as were also the packages of Yopon. Since that time the press of other engagements ha prevented my attention being called to it until seeing your announcement concerning the "New Tea," I concluded to make known to you, and I doubt not to many others, that the Government was about to import that which has for years existed in the benighted borders of poor old Rip Van Winkle."

## North Carolina Cotton.

A compilation from the New York Shipping and Commercial list, made by the Editor of the North Carolina Planter, sets down the number of bags of cotton received at the principal shipping points for the year ending the first of September, just passed, at 3,113,962; of this number 23,999 bags is set down as the product of North Carolina; yes reader, no less than 23,999 bags—after all her boasted and justly boasted progress in agricultural improvement, and notwithstanding the almost superhuman exertions that have been made by the people of the Old North State, within the last fifteen years, to increase the product of this valuable and favorite staple; still the number of bags produced is placed at the very insignificant figure of 24,000 bags.

Now is not this whole thing supremely absurd, and is not the cause of this false and deceptive statement perfectly transparent? Does any North Carolinian, of the least intelligence, believe that this estimate approximates the truth? We presume not.

We undertake to say that this calculation is a gross fallacy, perhaps we might say it is an unmitigated falsehood, but we will not exhibit any indignation on this occasion, because it may be that the hitherto apathetic disposition of our people in relation to public improvement, as well [illegible] ir want of that lauadable State pride which would have prompted them to have built up within our own borders a city from which to ship the products of the State, may very properly have subjected us to the contempt and humiliation which is implied by the statistics mentioned above.

Now we have in North Carolina about thirty counties which make cotton, some twelve or fifteen of which occupy as fine a cotton region as most parts of the South, some of it equal to the best parts of the South; any three counties of this latter portion will and does produce any year as much cotton as is put down to the credit of the State in the estimate above; of this we have not a doubt.

This wonderful statistical blunder can only be accounted for by the fact, (a notorious fact) that much the largest portion of cotton raised in this State, as well as wheat and tobacco, goes abroad as the produce of Virginia or South Carolina. Being shipped from their ports, they are supposed to be the products of those States.

This or these facts being admitted, what is the obvious duty of North Carolina in the premises? Is it not her duty and her plain and manifest interest to construct a system of public work, and so to construct them as that they shall all tend to a convergence to some point within its own limits, Beaufort, Wilmington or Newbern.—*Weldon Patriot.*

## Breeding Horses.

As there are many erroneous opinions entertained respecting the breeding of horses, I trust I may be indulged a hearing, if I give the public the observations I have made on this subject. As a practical farmer I do not hesitate to express my opinion, and to give the prominent reason, why we have so many horses inferior in size, strength, beauty and motion.—This is not owing to a want of care taken of the colts, or to their not being well fed and sheltered during the severity of the winter. The fact is, that most farmers are induced to take good care of their animals, because they know it is for their interest to do so. The great reason is, the mares selected for breeders are unfit for this purpose. They are, perhaps, too small; they lack physical vigor, or they have become old, or have been overworked and broken down. In addition to these defects, they are not sprightly nor agile in their motions, nor kind in their disposition. Such animals should not be selected for breeding. Nor again should the sires be ill-shaped, overgrown, coarse, ungainly in their motions, and malicious in their dispositions. Observation shows that colts usually take the shape of the head, ears, chest, limbs and feet, more from the sire than from the dam; while the size of the body, form of the hips, and color, seem to bear a closer resemblance to the latter. For this reason the mare should be of good size, well proportioned, and easy of motion; and it is unnecessary to remark that all these qualities, in a high degree, are requisite in the sire.—Some farmers greatly over-value horses that are fast trotters, and mares that move rapidly are held in market at a high price. But they are by no means the most serviceable. You want horses that are of good size, well proportioned, able-bodied, kind and gentle, and capable of endurance in travel or work. Such a race of horses you cannot have, if the sires and dams are defective in body and limb, and sluggish in their motions.—What are called *fancy* horses, that for riding and driving are chosen by the dandies of our land, are of little worth. They lack physical strength, and are incapable of endurance.—Their parentage is faulty—they are not descendants of a noble race.

*Rural American.*

*From the Cotton Planter and Soil.*

## A Remedy for Thumps in Hogs.

Dr. Cloud:—Dear Sir—Having been a subscriber to your valuable journal, the "American Cotton Planter," from the commencement of the enterprise, and believe I have been benefitted thereby, feel under obligations, not only to you an Editor, but also to your numerous contributors.

I am no writer, nor do I make any pretensions to agricultural knowledge or planting economy, but I do contend the most ignorant of your subscribers may learn from experience that which may have escaped the notice of the learned and wise. There is another principle I also contend for: if, by any means a subscriber should come in possession of any information asked for in a journal, by a contributor or the editor, he should consider himself indebted to them until he should make it known.

Several months since, I saw in the "Planter" an article asking for a remedy for thumps in hogs. I also have seen several remedies proposed, which remedies I have never tried, and of course neither condemn nor recommend; but as yet, none of your contributors have given my treatment to hogs for the disease. It has proven successful in every case for five years. I have tried it when the hog was so weak as being barely able to rise when laying down, and have never yet failed. As soon as a hog is discovered with the thumps, have him caught, and turn up the snout or upper lip, and cut across between the gums and lip, so it will bleed tolerable freely, and if, in a day or two, he does not improve, repeat it, and a cure will be performed.

There are a great many things that we know, but cannot tell why it is, and it is so with me in this remedy.

P. B.

*From the Western Democrat.*

## Chinese Sugar Cane.

Mr. Editor:—Having read in your valuable paper and other prints the experience of farmers in the cultivation of Chinese Sugar Cane, I have concluded to write you a few words as to my own experience.

In the Spring of 1857, I received from a friend some three or four seed of the Cane, which I planted in my garden and raised about a dozen stalks. Last spring I had about one acre of land prepared by throwing it up into beds about four feet apart, which I opened by running one furrow, and planted the seed therein.—In about eight or ten days after it came up I ran the plow around it, and followed with the hoes, taking out the grass and weeds, and thinned to a proper stand, which I think is about ten or twelve inches apart. Between two and three weeks afterward I had the rows thoroughly plowed, and this is the amount of labor done in its culture; though I think I should have gone over it again with the cultivator. In August I began to think of putting up a mill, but not knowing whether it would pay or not, I made some inquiries; some said it was all a humbug—that the syrup would sour during the summer, and not be fit for negroes. But this souring I am convinced is owing to an improper boiling of the juice—it was not reduced to a proper thickness.

I had a substantial mill put up, and

on the 30th of August commenced pressing out the juice, and boiling in large kettles; and the same afternoon we made, as an experiment, four gallons of the syrup, On the next morning I sent the wagon and three hands to the patch to strip, cut and haul cane to the mill, while two other hands and one horse were grinding, and I attending to the boilers myself. I had the mill stopped sometime before night, in order that we might finish boiling up the juice, for I had been told it would sour in one night, (the truth of which I intend to test the next time I boil.) The result of our day's work was 17 gallons of syrup, and enough cane cut and hauled for another day's grinding. We commenced operations again on the next day, but being interrupted by rain, we only made about 20 gallons—making in all 41 gallons of syrup, and I believe I have not used more than one-third of my cane. Every one pronounces the syrup not only good, but *very good.*

A neighbor of mine having a quarter of an acre of cane, cut and hauled it to my mill, and in one day we made 26 gallons of syrup, and the next half day we made 16 gallons—in all 42 gallons from one-fourth of an acre of land. I believe I can with two hands and one horse make 30 gallons of syrup per day, by having the cane ready at hand.

My family is delighted with the syrup, which is excellent fot preserving fruits and making "candy stews."

Yours, &c., CATAWBA.

---

Snow Ball Pudding.—Pare and core large mellow apples, and enclose them separately in a cloth spread with boiled rice; boil them one hour; dip them in cold water before turning out. Serve them with cream sauce.

---

Plants, when drooping, are] revived by a few grains of camph r.

*From the Anderson Gazette.*

## Agricultural and Mechanical.

When will South Carolina, and particularly the upper districts of the State, awake to her true interests in agriculture and mechanism? With a genial climate, and a fair soil, with proper energy on the part of her people, she might be made the garden spot of the Union; but here we are, still dragging out a mere existence; content to abide with old foygyism, until our children are all driven to the far west, leaving their native State to become serried into gullies, and fit only for the residence of antiquated old daddies and superannuated old negroes. Need such things be? Certainly not. Then what is the remedy, and is it within our reach?—The remedy is various in its character, but multiform as it may be, it is at our command.

This reform in matters and things can and must begin with the farmer. He must take the agricultural papers, that he may learn how to raise two bales of cotton to the acre instead of one, or fifty bushels of corn instead of fifteen or twenty, as now; learn how to stop his side hills from washing off into the creeks; how to properly drain his low lands; how to make a plenty of good manure; how and where to apply it properly; and above all, how to save and take care of what he makes. We could support a large family upon the waste of almost any good sized plantation in this section of country.

The next step for the farmer is to organize an Agricultural Society, and sustain it afterward. We do not know of anything that tends more to the improvement of any people than a well-conducted Agricultural Society. It socializes our feelings, elevates our standard of morals, creates a generous, laudable rivalry, improves our lands and stock; and, strange as it may appear, it alters everything for the better in mechanism. Let us illustrate.

We will take for an example, the farmer

that owns five hundred acres of land in one body. He now cultivates two hundred and fifty acres; but let him find out that he can raise more produce upon one hundred, and with less labor, and he will have three hundred acres to settle two of his children upon, for two hundred will be all that he wants to work the same force upon that he now works upon the five hundred. Out of the two hundred he needs but sixty or seventy for wood and fence, consequently he could have thirty or forty for pasturage, and still have his hundred for cultivation. His fencing would be reduced to one half or more, and the saving of travel from field to field would shoe his negroes and horses every year. His thrift under such maaagemement would soon excite him to have his house and other buildings improved, and a rat-proof corn crib must soon go up, and here comes a portion of the help to mechanism. His stock is becoming improved, and must be taken better care of, consequently a good barn must be built, and must be large enough to hold all his rough food and his grain until it can be thrashed at his convenience. No doubt some of our farmer readers have thrown the paper down in disgust or with a pshaw!—but take it up, for we have not half done with you. You must hear a lesson upon education yet. What! education for the farmer? Yes, indeed. Do you suppose we are going to let you remain ignorant of letters, while we tell you how to gain a knowledge of your business? Not at all. We want you to be able to sit down for an hour or two after the toils of the day are over, and converse intelligently with your family of what is going on in the world, particularly of the affairs of your own State and District. "How shall this be done," say you.

Your attention should be first turned toward Agricultural Colleges, or agricultural professorships in those that are already in existence, that your children may be educated in a knowledge of the business that has always been considered respectable by their father. You must then stop the absurd notion that many, too many of you now have, of running your sons into the professions, and study more of their bent to employment for life. Make him an intelligent farmer or a mechanic, and if you have one adapted to a profession, then educate him for it, if he wishes it. This course would soon put an end to third and fourth rate lawyers and quack or charletan physicians.—Does education end here? By no means.—There is a home education to be kept up and pursued to the end. This must be assisted by a well selected library, and above all, several good newspapers. These should be varied in their character. The first of these should be the best political paper of the country, directed to yourself, a religious paper directed to your wife, and a literary paper to each of your children as fast as they can read, and do not forget something of the comic nature for that playful little fair-haired boy. But we have not done with the newspapers, for you should have your own district paper, and the papers of two or three adjoining districts. All these papers should have a place where they can readily be taken up by any of the family when they are at leisure; and depend upon it, this course will have a tendency to not only educate your children, but will keep them out of much mischief when young, and prevent them from much that is vicious in after life. We can enter any family in our land, and hold a conversation with its members for thirty minutes, and then tell to a certainly whether that family is supplied with newspapers or not. We will lose all our worldly goods, aye, and every thing we have, with far less of pang, than we could part with the papers. This course, on the part of parents, would so affix the affections of the children to their home, that many who are now roaming thro' the far west, subjected to much that is evil, would have been good citizens of our glorious old State.

Farmers and mechanics, will you awake? Put your shoulders to the wheel, and make a position for yourselves, that will tell well upon your own existence in this world, and will benefit your children beyond calculation. The God of nature intended that you should rule the earth; then why remain in any position below what was intended?—Stop learning your children to drink whiskey—devote the money to books; let them have food for the mind as well as the body; and depend upon it, you will in a few years see an alteration for the better. It is said that men are the architects of their own fortunes; but we believe that parents have more to do in this matter than is generally acknowledged.

*From the Country Gentleman.*

## Comparative Economy of Spring and Fall Manuring.

Professor Stoekler, of the Royal Agricultural College, Cirencester, England, together with Professor S. W. Johnson, of Yale, and several farmers in the State of New York and elsewhere, are, it seems, convinced that manures hauled out and spread broadcast on the soil during late fall and winter, do not suffer any material loss of ammonia, and other plant food, from such exposure; that the evaporation which invariably affects manure in such conditions, does not carry off any considerable quantity of the elements used as food by plants, and which therefore it is desirable to prevent the waste of, whether such waste results from evaporation or otherwise. As this view, demonstrated I believe, at Cirencester College, is novel, and the reverse in some respects of that which has long governed the practice of manuring, and the hypothesis on which it hinges, viz: that it is most economical to plow in manure as soon as it be spread—which includes spring manuring where plowing is delayed into spring—because of the supposed loss by evaporation, &c., after spreading—it deserves somewhat closer attention, in order, if possible, to discover the reason of the change. More especially should we inquire into it, because the improvement of modern agriculture results more from the application of real manure, substantial plant food, than from almost any other condition.

A certain, say sufficient, proportion of water is necessary as a condition to the partial solution preliminary to the fermentation of any substance it is wished to expose to the process of rotting; and if such proportion, which varies according to the composition of the substance, be lacking in any degree, rotting will be incomplete in proportion to the deficit, and fire-fanging—the result of too dry fermentation—will result.—But when the moisture present is in proportion to the quantity of heat evolved by the commingling of different substances, and the subsequent liberation of their gases from organic combinations, as in straw, humus, animal excrement, &c., &c.—no result as fire-fanging, or too dry fermentation can take place. A like incompleteness in the process of fermentation and rotting will be the result, if a similar lack of another of the conditions thereto—as heat—prevails.—In this case, however, when water is much in excess of heat, the nutritious properties of the manure heap will not be burned, but soaked out or absorbed by the excess of water; and in whatever manner such excess of water passes off—whether it flows or evaporates—it will carry away a large portion of the best properties of the manure held by it in solution, with it; leaving the manure by so much deficient, as in the case of driving off valuable matters by excess of heat in fire-fanging. It is equally obvious that the presence of air, in either deficiency or excess, would affect the process in the degree of its variation from the true proportion. (Hence, in England, turning thick yard-dung and compost heaps, to secure the necessary amount of air, is generally practiced, and therefore practically appreciated) If too much or too little air be present, the conditions will be out of proportion, and the materials under process will become too dry or too moist, according as evaporation has been too great or too small in extent, excess of air drying the mass, and too little allowing the contained water, together with the equalization of heat by the atmosphere, to cool it below the point required for fermentation. Hence, the practice of covering unrotted manure heaps with mold, to keep the necessary heat and moisture. These seem to be facts well verified by long exposure to observation—and the resulting conclusions are therefore supposed to be correct; and if so, it is certain that whenever air or moisture be present in too great or too small proportion, the conditions necessary to produce well rotted manure are incomplete to an equal extent. As to heat, this condition is in a large degree produced in the fermenting mass, or perhaps, rather changed from a latent to an active state by the frictional movement of the parties as they are separated by disorganization, and move to the new positions and relations to which those affinities assign them, the degree of their volability and affinity being the measure of their motion, and often combination.

It was demonstrated, I believe, by the same professor at the Cirencester College, that ammonia, the substance which is of so much value to plant and animal, is not set free or lost from manure except as the result of fermentation in some degree.

If, then, manure be spread at the time of drawing out, or immediately thereafter, and plowed under, no time comparatively elapses for the loss of its ammonia. But the method is very inconvenient, so much so that sometimes it prevents the drawing out of it in the spring at all. To get the manure under in a fresh state, requires two teams at least, and attendants, a doubling of the ordinary forces—a majority of farmers having but one—and needing no more in the usual course of farm work. If the manure be drawn and dumped or heaped, there still remains the spreading to be done, the hauling, heaping and spreading, together require much more time than would be consumed in spreading directly from the wagons—if carts be not used—at the time of drawing. Besides, an objection to heaping is, that there is always more manure left where the heaps stood, than on other parts of the ground—the consequence of breaking up by repeated moving.

But even if some waste should take place from the broadcasting of manure on the soil in the fall or winter, and allowing it to be uncovered for several weeks, or months even, before plowing under, such loss must be very trifling, because fermentation is prevented by the cold air of this season, and no loss of nutriment takes place by the mere evaporation of water without fermentation; hence, manure does not lose its ammonia by being exposed during the winter, even if it blow and rain and snow and freeze. But to draw out manure at the time the ground is fit to plow—the ground is not dry enough to bear up the wheels till it will do to plow—will cost at least twenty-five per cent. more than drawing it in fall or winter, from the difference in the value of time and labor, leaving the indirect loss of thus consuming time needed for the peculiar labors of the season, out of the estimate. Such objections and others, in drawing out manure in spring, which might be drawn and spread in the fall, present themselves. Spreading fall or winter drawn manure should be always preferred to heaping, because when manure is heaped, the middle of the heap is exposed to fermentation, and this in extent according to the size of the heap—the heat necessary to such effect being set in motion by chemical action, protected from the cold by the outer part of the pile; the resulting loss by fermentation need not be now reiterated.—Thus, then, although more bulk of and moisture manure appears to be left by heaping, it is really quite otherwise as to real manure, for its essence has been dissipated by the liberation consequent on the heat in the middle parts of the heap. These, and the repeated occupation of time and labor, comprise some of the objections to heaping manure at any time. But no treating in the heap and consequent loss, no further occupation of time in spreading, &c., follows, when manure is drawn out in the fall and spread as fast as it is drawn. So treated at those seasons, but little evaporation and no fermentation can take place, and there is therefor no loss of value, or comparatively none, attending fall and winter manuring.

These views are based in part on Prof. Voekler's demonstrations, but more so on facts exposed to general observation; and if correct, the general theory that manure loses its nutrient properties by being drawn out and spread in the fall and winter—and should not therefore be thus treated till spring—is based on a fallacy, and the practice resulting from it may not only be relinquished without loss or regret, but the reason and advantage, and in many instances doubtless, such will be the result, equally to the individual and public benefit.

J. W. CLARK.

---

Horse Power Saw Mill.—Among the many machines which appear upon exhibition at the Fair Grounds, we have seen nothing to please us more than the Horse Power Saw Mill, exhibited by Mr. Wm. Tappey, of this city. Its construction is simple and substantial, it is readily transported from place to place, and is operated with as much ease as an ordinary wheat thresher. No arrangement of the kind, could, we conceive, be better adapted to farming purposes.

*Petersburg Express.*

*From the Southern Planter.*

## Corn-Shucking.

Mr. Editor:—In many parts of Virginia, it has for a long period been customary among some farmers to solicit assistance in shucking their corn in November and December, annually. The corn is hauled up and the proprietor, or his overseer, wants to get one, two or three hundred bushels of corn shucked during one night. To accomplish this object, the slaves for several miles around and upon adjacent farms are invited to attend, and to induce them to do so, they are notified that they will receive a good supper and a plenty of whiskey. As might be expected there is a large assembly of negroes, a large amount of corn is shucked, many songs are sung, a hearty supper eaten, and a great deal of mean whiskey swallowed. Towards the conclusion of the frolic, quarrels and fights occur which sometimes terminate most disastrously. Many years ago my observation convinced me that these assemblies were improper, because they tended to corrupt and debase the slaves. I have never had one of these fashionable corn-shuckings, but have always had my corn shucked by my own slaves.

Unwilling that my slaves should be exposed to the liability to become involved in quarrels and fights by attending any corn-shucking elsewhere, I gave them strict orders never to go to one without my special leave. I directed my overseer to repeat these orders from time to time. Notwithstanding these precautions, a neighbor of mine invited my negroes some 12 or 15 years ago, (without the knowledge or permission of myself or overseer) to attend a corn-shucking on his farm. Several of my negroes accepted the invitation. Corn was shucked, songs were sung and whiskey drank. Soon after, quarrels and fights took place. The result was that a young and valuable negro man of mine was killed on the spot by another negro who was drunk and who was the assailant. The latter was subsequently tried and condemned to be hung.

My negro man was killed when in the employment of my neighbor, and as he was thus employed without my leave and in disregard of my orders, I might have sued and would probably have recovered the estimated value of the negro man. Although provoked at the conduct of my neighbor, I forebore a suit.

I have been prompted to make the foregoing remarks in consequence of having seen in a late number of the Richmond Dispatch that during the fall of 1857, a negro man was killed in Tennessee, at a corn-shucking, held on the farm of Mr. Jones, who had invited negroes in the neighborhood to aid his hands in shucking corn. The negro who was thus killed, had attended the corn-shucking without the leave of his master, who sued Jones and *obtained judgment against him.*

I enclose the article from the Dispatch, and will thank you to insert it as a warning to all persons who are fond of corn-shucking assemblies, and who are apparently insensible to their evil tendency. Having lost one of my own negroes by the misconduct of a neighbor, and on many other occasions heard of quarrels and fights among the negroes assembled, I am more than ever opposed to this mode of having the work on the farm performed. A PLANTER.

Important Decision.—A Mr. Jones, of Rutherford county, Tenn., held a corn-shucking last fall, and invited assistance from his neighbors. Among others, a negro came to the corn-shucking without his master's consent, and was killed in the course of the night by a drunken man, named Hagar.—Hagar was sent to the penitentiary, and the owner of the negro sued Jones for the value of the negro, and obtained judgment, on the ground that he was on Jones' premises and in his employ without leave.

A New Source of Industry being Developed.—We understand from the Agent of the Railroad at Raleigh, Col. Allen, that there was shipped from that place, in the month ending the 1st day of November, a fraction less than 800,000 pounds of dried fruit—valued at sixty thousand dollars.

Thus showing the tendency which Railroads have to develop the latent sources of industry and wealth. This aggregate, as large as it may appear, is but a trifle compared with results to be realized hereafter. This trade is now in its infancy; in a few years the amount of it will be reckoned by millions.—*Weldon Patriot.*

*From the Cotton Planter and Soil.*

## The Farmer's Fireside.

BY FEO.

How happy was the eventide,
In the good old days now past and gone,
As round the farmer's fireside,
We gathered when the day was done;
The fire-light flickering on the wall,
Sweet voices sounded in the hall.

Then songs and mirth and tales went round,
And many a shout of laughter clear,
Rang out with joyous sound,
Which loving hearts grew warm to hear;
Gay shadows danced upon the wall,
Like city belle at the city ball.

The ruddy blaze of the great pine fire,
Glanced on the good dame, happy and mild;
Burnished the locks of the gray-haired sire,
Painted the cheeks of the frolicking child;
Brightened with lustre the long broad hall,
Cast many shadows on the wall.

And when the merry Christmas came,
Stockings were hung on the Christmas tree;
And the simple gift and the good old game,
Made the old feel young and the young full of glee!
The shadows lingered long on the wall
And light feet lingered long in the hall.

Many Christmases came and went;
The old folks stood on the brink of the grave;
Their forms were withered and feeble and bent,
And the youth grew up to manhood brave;
Then the shadows tremble on the wall,
Like leaves of Autumn, ere they fall.

Those days are gone, time swiftly fled,
And green mounds where the willow weep,
Among the nations of the dead,
Show where those old folks calmly sleep!
Then silence reigned within the hall,
And darkness shadowed all the wall!

The little ones that sported there,
Scattered o'er earth far and wide;
Assailed by worldly grief and care,
Weep as they think of the old fireside!
In dreams they sport again in the hall,
And dance to the shadows on the wall.

## Cotton Seed.

You are now ginning, and your cotton seed intended for manure, should be kept from the weather and under cover. In no item of the same value does the plantation lose so much, as in its cotton seed intended for manure, which are thrown out in heaps against the side of the gin house, to lie through the winter, decaying and exposed to the sun, wind and rain.—In this condition a heap of cotton seed loses 30 to 50 per cent. of its value by the middle of February. We shall call attention to this subject again in our article of work for January, when we shall go fully into the subject of applying cotton seed as a manure for both corn and cotton, in their unrotted state. This may to many persons, appear paradoxical at first view, as nothing is properly food for plants in its undecayed condition, yet our experience of several years has proved conclusively that such is the solubility of cotton seed, that put into the ground in January or February, they furnish food for the young plant, either corn or cotton as soon as it is up. In this way none of the valuable gases are lost by evaporation, etc., as in the case of rotting the seed in bulk.

*Cotton Planter and Soil.*

*From the Cotton Planter and Soil.*

## Untie the Hame String.

Dr. CLOUD:—*Dear Sir*—Not a year passes but we hear of some negro being thrown from his mule or horse, going to or from the field, his feet hanging in the traces, and getting killed, or badly injured—perhaps for life. I have thought for five or six years past that I would give, through some Agricultural Journal, a remedy for these disasters, which *never fails* to prevent all accidents of this sort, but kept forgetting it; being reminded of it only when I would hear of some unfortunate plowman being thrown and badly mangled. Had I done so sooner, it might have saved the life of some one now in his grave. I now give the remedy without charge, but beg "everybody and the rest of mankind" to adopt it at once. Never permit a negro to get upon the back of a mule or horse under any circumstances whatever, with the hame string tied—if they do, whip them without fail. Then if they are thrown from their animals, and they get tangled with the chains, negro and gear all come to the ground together, nine times out of ten. Remember it, everybody. Yours, &c.,

G. D. HARMON.

## A California Reaping Machine.

The California Agricultural Society held an Annual Meeting a few weeks ago at Marysville, at the close of which they were addressed in a very able speech by the Hon. Samuel F. Bell, the orator of the occasion. Mr. B. commenced by stating that without agriculture there was no enlightenment, and that the farmer was king; if there were no farm, no market, there would be no enlightenment.—After commenting on the wonderful fertility of California, Mr. B. gave the subjoined description of a reaping machine which certainly surpasses any other invention of the kind that has yet appeared in the world. It is claimed, he said, that "California invention has succeeded in producing the best reaper in any land. It owes its existence to the genius of an inhabitant of Santa Clara county.—With two horses and two men it reaps twenty-five acres in a day; and tho' the grain be lodged and tangled, it picks it up, and does its work so thoroughly, that scarce a head is left ungathered. We had scarce gotten through the understanding of the merits of this machine when on the same day we were introduced to, perhaps, a still more marvelous instrument, the invention of a gentleman of Alameda county. This mighty machine went into the field of the standing harvest, and as it swept along, it reaped, and thrashed, and cleansed and sacked, the golden grain. One sack in each minute of time! The whole world has as yet seen nothing like it!"

## Curing Hams.

A correspondent, Mr. Wm. H. Bennett, of Warwick, R. I., sends us the following description of a method practiced with great success by him for several years in curing hams:

He first takes the cask in which the hams are to be salted, and smokes it for half an hour over a low fire made with walnut chips. He then makes a pickle for two hundred pounds of ham by dissolving fourteen pounds of Turk's Island salt, half a pound of saltpetre, and two qaarts of molasses in sufficient water to cover the meat when placed in the barrel. This pickle is skimmed while the salt is being dissolved at a scalding heat. When cooled down this brine is poured upon the hams in the barrel, and they are allowed to lay in it until they are salted. They are then lifted out, hung up to dry, and are afterwards rubbed over with a composition of fine salt, black and red pepper, and some ground cloves. When this operation is performed, they are sewed in bags, and hung up with shanks downwards. A dry, cool attic chamber is the best place to keep them. Hams thus preserved have a very excellent flavor, and do not require to go through the smoking process.

The simple smoking of the cask will have the effect of communicating a mild, smoky savor to the meat. Of this we are confident, because we have seen it done, and can endorse Mr. Bennett's experience in regard to this feature of the process. We believe his practice is a good one.

# EDITORIAL.

## RALEIGH, DECEMBER, 1858.

☞ The Postage on the N. C. Planter is ¼ cent on each No. if paid quarterly in advance; or ½ cent on each No. if not paid till the end of the quarter. Six cents, paid in advance, will pay the postage for one year, to any place out of the State.

### End of the Year.

The present number of the North Carolina Planter closes the first year of its existence. To nearly all our subscribers have been furnished the twelve numbers, constituting one year's subscription. All such will receive this No. with the CROSS MARK on it, intimating that the time for which they have paid has expired, and we earnestly appeal to them to send on the money for another year's subscription. And we also send a Prospectus to each, earnestly entreating them all, after putting their own name to the list, that they will then try and see how many others they can get to subscribe.

The past year has been one of trial with us. We might say we have been greatly discouraged, on account of the meagre support we have received from the Planters of the State, and others. But we do not wish to look at the gloomy side of the picture now. We would fain believe that our dark days are over, and that 1859 will see the Planter in ten thousands of the homes of our Farmers and Mechanics. If you will take the accompanying Prospectus, each of you who receive it, and send us five, ten or twenty subscribers, the work will be accomplished.

We have endeavored to make the Planter a *useful* visitor to its subscribers—to fill it up with valuable practical and scientific matter, that could be tested to the profit of its readers. We hope we have succeeded in doing this much for the Farmers of the State.

During the ensuing year we shall strive to make it still more worthy of the support and confidence of those for whose benefit it is intended. And the more *they* help *us*, the greater aids and facilities we will be able to command, to make the Planter *all* its friends desire to see it. If our agricultural friends will give us the *means*, by subscribing liberally, we intend to bring to our aid the most efficient talent and experience in the State, in conducting the North Carolina Planter.

We will not write a rallying appeal to our friends to come to our aid in supporting this work. We find one already to our hand in the Virginia Southern Planter, which we here append. Please read the following and then go to work and get us up a club of subscribers to send us by the first of January! And then see if you cannot get us double the number to send us before the first of February. We shall confidently expect at least two thousand subscribers by the first week in January:

> THE NORTH CAROLINA PLANTER.—The Editor of this paper, (says the Editor of the Southern Planter, at Richmond,) in an address to the Agriculturists of the State—which we copy below—distinctly informs his patrons that if they desire the continuance of his paper, "the number of subscribers must be greatly increased." Will the intelligent and patriotic Farmers and Planters of the Old North State suffer this excellent paper to languish or die, for the want of adequate support? Do they not owe it to themselves to sustain a home organ, (and where will they find a better,) for the advocacy of their interests, and for the dissemination of knowledge on those branches of husbandry in which, if they are not in advance of the age, they must all feel a conscious need? Who among them possessed of a particle of State pride, or entertaining a kind sentiment towards his neighbor, that would prompt him to a trifling sacrifice to promote his good, can refuse the mere pittance demanded of him for such purpose? Especially, when it is remembered, that, the benefit conferred, will react in blessings upon himself in "good measure, pressed down and running over," while he will instrumentally contribute to the common weal in helping to erect a fountain of knowledge, whic

will send forth its healing streams to enrich and bless the State!

For very shame, gentlemen, double the subscription list of your Planter, *and for the love of well-doing increase it* FIVE-FOLD!!—You will feel all the better for it!

We heard of a wealthy gentleman who was bewailing to a friend, the determination of a very talented son-in-law, (of whom he was justly proud) to remove to a distant part of the country for the purpose of bettering his pecuniary fortune. "He is right to go away," answered his friend. "He has been waiting on you for years, and you have done nothing towards meeting his just expectations. He is of course right, in determining to leave you. But, if you wish to intercept his purpose, provide for him according to your ability and his merits, and my life upon it he will not leave you." It was done. The removal was arrested. In a short time afterwards, the father-in-law acknowledged to his friend that he had found the greatest satisfaction in following his advice. "Would you double your satisfaction?" rejoined his friend. "Then just double your benefaction!"

## North Carolina Agriculture.

Ours is almost exclusively an Agricultural State; and it is the interest of every other department of industry and enterprise, that *this* one should be faithfully developed and liberally fostered. Our State and County Agricultural Fairs and Associations are doing much to put in motion the stagnant waters of the Agricultural mind; to bring our planters together so that they may exchange views and compare notes, whilst the system of premiums offered will encourage competition, stimulate industry and enterprise, collect and disseminate reliable information through addresses and essays, and put to shame that old fogyism, or dogged adherence to absurd customs, simply because they are old, and that self-sufficiency and conceit which stand in the way of all improvement.

But this is not all that is needed. Let our planters throughout the State set about the work in earnest, and command from the Legislature whatever aid may be necessary to place the agricultural interest of the State in the front rank in point of educational advantages and scientific appliances. Who has so good a right to claim the aid of the government as those from whom it derives its existence and support? We remember an old cut representing a king with sceptre in hand, proclaiming "I govern all!"—the priest in his robes says, "I pray for all!"—The soldier, sword in hand, exclaims, "I fight for all!" whilst in the back ground is a sturdy old farmer drawing out, slowly and reluctantly, a long purse, with the exclamation "*I* PAY *for all!*" This is emphatically true of the farming interest in this State, and surely it is not an exorbitant or unreasonable demand that those who pay the taxes, should require that a portion of their contributions should be applied to the use of Agriculture, so that it shall be made the pride and ornament of the State, and the harbinger of a grand epoch in agricultural progress.

## Raising Potatoes.

The practice of growing potatoes under straw, we find is yearly extending. It is now some four years since statements were first published of the practice and results, and as yearly we have read the records of those who have adopted it, we do not recollect an instance of failure, or an example of rot occurring in fields so grown. The potato, it is well known, succeeds best in cool even temperatures, and as the straw on the surface has a tendency to create more regular heat and moisture, than ground exposed to the full rays of the sun, giving thereby a longer season of maturity, we presume the cause and results are plainly apparent. The process of such practice is, to plant in the usual season, covering the seed very lightly with earth, and afterwards covering the whole field six to eight inches deep with straw. No labor of cultivation is practised, but in the fall the straw is raked off, and the crop of potatoes found superior to those grown in the old mode of hilling.

On light sandy or dry ground, we believe this course will be successful, if planted late in the fall. We once planted in January, and succeeded admirably, but the next and following years we had no land sufficiently drained, and, therefore, could not continue our experiments.

## Preparation for Spring Crops.

The season of the year has arrived, says the Southern Farmer, when the labors of the cultivators of the soil are to be directed towards making preparations for the intended crops of the ensuing year. Among the many objects which should demand his early attention, that of plowing the land designed for corn is not the least important. There are many reasons why the farmer should not delay this operation till the spring months. He has leisure now to perform it better, and the land is generally in better order for plowing than early in the spring, when the soil is so frequently in an unfavorable condition, until late in the season, at which time the work has to be hurriedly, and consequently imperfectly performed, and in too many instances done when the land is much too wet. Fall plowing for a corn or oat crop gives to the land the benefit of the winter's frosts, which greatly aid in properly pulverizing the soil, and also by exposure tends to destroy the larvæ of many insects which prey upon the growing crops. The utmost care should be especially exercised to guard against all standing water on land plowed in the fall or winter. If this precaution is not observed, all the advantages of early plowing are lost. All ditches should therefore be carefully cleaned out, and surface furrows opened for carrying off the water from rain or melting snows. These surface furrows should in all cases be cut to a depth of several inches below the depth of plowing, so as not only to keep the loose soil free from water, but also a portion at least, of the subsoil. If this necessary precaution is attended to, the soil will be found early in spring in good condition for further preparatory culture for the reception of seeds of any description.

Another operation of primary importance at this season of the year, is the providing of ample and good shelter for stock of all kinds—a department of rural economy too often sadly neglected in this climate. We see thousands of cattle which, through the inclement season of winter, have no other protection from its keen blasts and pelting storms, than the lee side of a bush or a rail fence, where they stand cowering and shivering, with their staring coats of hair full of the cold rain, or covered with frozen snow or icicles. This is not only a cruel exposure to the poor animals, but on the part of the farmer is a sad want of economy, and the fruitful source of the almost universal complaint heard in the spring of weakened teams and emaciated and spectral cattle.—When cattle are not properly sheltered during our changeable winters, no matter how amply they may be fed, all they can possibly consume is necessary to supply material for that combustion which is requisite to supply the increased demands for animal heat; so that during winter the poor animal not only fails to gain flesh, but a reduction of that formed the preceding season takes place;—hence, the cause of the many skin covered skeletons we see every spring. Cattle or stock of any description, well sheltered during winter and stormy weather, will require less feeding than when exposed, so that the practice has economy as well as humanity to recommend it.

The preservation and accumulation of manures is another object requiring the farmer's attention during the fall and winter.—All substances suitable for this purpose should be carefully collected and husbanded, and ready for application early in the spsing. In this climate we do not recommend the filling up with straw in stables and cattle yards, beyond what is necessary for the feeding and comfort of the animals. A better mode we believe to be, the application of all surplus straw as a top dressing on clover or pasture land—which can be made at intervals during the winter when the land is fit for hauling over. So that when the spring arrives, the largest bulk of improvement will have been made to the land, and the farmer thus afforded more leisure for the preparation of the soil for crops.

* * *

Effects of Agricultural Fairs.—One of the happiest effects of Agricultural Fairs is the social intercourse and enjoyment which they bring about between the people of all sections of the State. They are sometimes pronounced grand humbugs, but nothing is a humbug that by a very slight expenditure of money and time, adds largely to the aggregate of human happiness. Even if these Fairs did not improve the agricultural interests and the breed of stock, which will scarcely be pretended by any one; even if it were possible that an assemblage of farmers from different sections of the country could come together, and pass a week in each other's society without imparting to, or discerning from each other any valuable fruits of their mutual experience and knowledge, still the benefit to the community, in a social aspect, would more than compensate for the time and expenditure bestowed upon them.

## Opposed to Book Farming.

We had supposed that the foolish prejudice against Agricultural Books and papers, which a few years ago existed in the minds of ignorant and conceited men, had passed entirely away. We were mistaken. A few relics, of such absurd old fogies, still exist, as we can testify. A case or two recently came under our observation, and for their benefit as well as for that of all others of like ilk, we copy the following very sensible and pertinent extract from an "Easy Chair's' reflections, found in a late number of Harper's Magazine:

"But let an old Easy Chair say frankly to any farmer who is reading these lines, that education is the grand means of increasing the dignity and the profit of agriculture.—The farmers, as a class, are not the cultivated men they ought to be. As a class they are less well instructed in their own pursuits than any other class, and there is no calling in which intelligent instruction is of more direct value. They are foolishly jealous of books and of book farming, declaring that a farmer must learn by experience. They might as wisely say that a doctor, or a surgeon, or a lawyer, or a chemist must learn by experience. So must they all—but how? By learning the laws established by the experience of others, so that their own experience may be of some use. Would any farmer who laughs at "learning" how to be a farmer, except by doing as his great grandfather's great grand-father did, submit himself, when he was stricken suddenly ill, to a green youth who had never "studied" medicine, but was going to learn how by practicing? The farmer would naturally cry out, "No, thank you—I don't want any body learning how on me!" And so might the outraged earth say to the farmer who proposed to farm without learning how, "No thank you—I don't want any body learning how on me!"

And these Fairs are, or ought to be, of the greatest service in this very direction. By bringing men together, that they may compare their practice and their theories, their machines and their results, they are doing just what books do, at which they laugh so sneeringly; and wherever the Fair languishes, there farming will be most likely to languish. Let the farmers show that they are not contented with any less intelligent cultivation in their own art and upon general subjects than any other class, and agriculture will become a fine art, honored and honoring."

## Hints to Farmers.

Be systematic.—Here we have one of the first principles of successful agriculture. Let all transactions be conducted in a business-like manner. Take note of every operation, whether you buy or sell, receive or disburse, sow or reap, make a promise of a bargain. To do this, it will be necessary to keep a diary, and we would say, do so, if for no other object than as a ready means of comparason.

Be thorough.—Never half-do a thing yourself, nor permit your men to glide over their labors. "If it is worth doing at all, it is worth doing well," would prove a golden maxim to thousands of farmers, if they would not only adopt it as a portion of their creed, but exemplify its teachings in their daily life. Away with these scratchers—men that go beneath the surface are the kind wanted.

Leave your land in good heart.—It should be the object of every tiller of the soil to leave his land in good condition after the removal of a crop, and, at the same time, obtain as remunerating returns as possible. This can be done only by husbanding all the sources of fertility upon the farm, and adding thereto in every available manner. This is the Alpha and Omega of progressive agriculture. Never boast of a "bank account," if it is obtained at the expense of your farm.

Study your profession.—It is not alone the energy that wields the spade or holds the plow that ensures success. There is a "higher law," the culture of the mind, and it must go hand in hand with the culture of the soil. The relations of science to the farmer's calling are intimate. Good books are aids in the attainment of knowledge, but never pin your faith on the *ipse dixit* of any individual—think, experiment, and judge for yourself.

Stick to the farm.—Amid your plans for the future, never, for one moment, harbor the idea of bettering your condition by entering the arena of commercial life. Do not exchange a home of quiet, real enjoyment, for the turmoil and illusion of a city residence. Barter not sweet repose for visions of empty wallets; nor let notes, due on the morrow, assume the prerogatives of the nightmare. Very poor comforters, for care and anxiety, are these little realities in the commercial world. Stick to the farm.—What though hard labor be the every-day command; it is noble, healthful, and conducive to the developement of the whole man.

## Farmers and their Wives.

Said a young person to a lady, who sat holding her child, "Now, what good will all your education do you? You have spent so much time in study, graduating with high honors, learned music and painting, and now only marry a farmer. Why do not you teach school, or do something to benefit the world with your talents; or, if you choose to marry, why not take a teacher, a clergyman, or some professional man? But, as it is, you did not need so much learning for a rural life."

The lady replied, "You do not look very far into the future. Do you see this boy on my lap? I need all the study, all the discipline, both of mind and body, that I may train him aright. You see, I have the first impressions to make on a fair blank of his pure heart; and unless my mind was first cultivated, my own heart first purified, how could I well perform the task now placed before me? And, besides, do you not suppose that farmers have hearts like other men, tastes just as pure, because they guide the plow and till the soil for their support? Do you not suppose their minds are just as susceptible of cultivation and expansion as other men? Have they no love of the beautiful, in their nature, of art? Cannot good painting be just as much admired on their walls as others, or does the evening hour never pass as pleasantly with them, when they gather around the piano after a day's labor is finished? Ah, my young friend, you have made a sad mistake in your reckoning."

Of all the occupations, give me that of the farmer. It is the most beautiful; his life is freer from care; his sleep is sweeter; his treasures safer. A farmer need not be a slave to any, for he has none to please but himself. Not so with almost any tradesman, mechanic or professional man. They have more or less to do with the world at large, and have all manner of persons to deal with, so that they have need of the patience of Job to live. They are well aware that they must not freely speak their minds at all times—that if they do, they will lose custom; for they depend upon the people for a living; therefore, they are the servants of all. Then what can be desired more—what is more peaceful, prosperous, honest, healthful and happy than a farmer's wife?—*More's Rural New Yorker.*

*From the Christian Sun.*

## Curing Bacon.

It is now the season for curing bacon, and we insert a receipt for curing hams, which appeared in our paper in January last. It was given to us by a citizen of good old Isle of Wight, everywhere noted for curing good bacon. Try it, and you will not be disappointed in curing good bacon this season.

### CURING HAMS.

*Mr. Editor:* I send you a receipt for curing good hams, which you are at liberty to insert in your rural column, if you feel inclined, after examining it.

Let the hog hang long enough in the open air, to get perfectly cool through, before cutting. When the ham is cut, put one large tablespoonful of pulverized saltpetre on each ham, and rub in well on the fleshy side, especially near the hip joint, and let it lie for ten or twelve hours; then rub it in well with blown salt, and pack it away, and let it remain about as many days as the ham will weigh pounds; then take it up, and wash clean in warm water, and before it dries, sift on as much powdered black pepper as well stick to the fleshy parts; hang it up, and let it remain for two or three days, or until it is dry. Then smoke it well with green hickory or oak, the former somewhat preferable. And occasionally during the year, when the weather is damp have a smoke raised under it, and it will not become buggy.

The "Smithfield hams," noted everywhere for their fine flavor, and which always command a higher price in the market at Norfolk and other places, are cured in this way.

A FARMER.

## Murdering Land.

The system of *murdering* the soil, spoken of in the following article from the Baltimore American, is common all over the country. We commend it to the careful attention of the farmers of North Carolina, particularly where tobacco is the staple production:

An Old, Unpunished Crime.—Summary laws are enacted by all nations for the punishment of crimes against life, limb, and property. The murderer is hung. Even if the murderer be connected with a railroad company, he stands in awe of a jury, always willing to award unreasonable damages. He may lose his place, and his place is his living. So life answers for life. Even in the city of Washington, there are moments of spasmodic vengeance, when the murderer is subjected to considerable temporary inconvenience. The robber, the forger, the incendiary, the burglar, are committed to the penitentiary. There are, it is true, exceptions to this rule. The robber may be wise enough to put his hand only into the Federal till, yet he is in danger of being talked about. The newspapers may annoy him by making a great man of him. If the robber choose, he may become a bank officer. Then, to ensure safety, he need only default for a *very* large amount; but still he must decamp, and decamping, even in the manner of Swartwout, is troublesome. Selling government property appears to be the best method of appropriating what is not one's own, yet one must remember that there are such things as Investigating Committees—bodies which, after interminable sessions, and incredible cost to the Treasury, *may*, by a bare possibility, do something more than offer a criminating minority report, and an exculpatory majority report.

There are laws, not only for the punishment of crimes against man, but against animals. Cruelty to animals is certainly punished—on the statute books. Occasionally, a brute, for the unmerciful beating of another brute, is brought before a justice of the peace, and made to pay a small fine; but, in ninety-nine cases out of a hundred, the mule, the wife, the operative, the clerk, the ox, and other slaves, are compelled to submit in silence. Everybody knows how much they suffer; therefore, it is nobody's business even to attempt to mitigate their sufferings.

Gambling, Sabbath-breaking, and profane swearing, are also punishable—if we may believe the books, and refuse to trust the evidence of our own senses. It is to be suspected, that when the laws for the punishment of these crimes were enacted, the lawmakers did not contemplate members of Congress, members of hose companies, Sunday excursionists, and the preachers of Sharpe's rifle sermons, as belonging properly to the human race. Certainly, all these enjoy a regular immunity from punishment. Why they should enjoy this immunity, no jurist has yet been benevolent enough to tell.

Seeing how carefully injuries to life, limb, and property are provided against, it seems truly marvelous that the crime of all crimes, the crime which, in its effects, is far more disastrous than murder, or arson, or theft, should remain unpunished, and even unnoticed. The crime to which we allude, though not indeed unknown to the business and professional man, comes home only to the tiller of the soil, the farmer. For want of a better name, this crime may be called *land murder*. The term explains itself, yet a few words of illustration may not be out of place.

This crime is as old as Adam. For his sin, God cursed the soil, which otherwise, if we accept the orthodox interpretation of Scripture, would never have needed tillage. Since Adam's day, the earth has been afflicted with an unbroken series of generations of land murderers. Of course, the majority of these assassins of the soil are assassins, not from design, but from ignorance. Against these, we have nothing to say; we leave them to the tender mercies of the agricultural papapers, hoping that a booby who imagines he is improving his land when, in point of fact, he is, so to speak, cutting its throat, will be mildly dealt with.

But there is a large class—particularly large in the Southern States—of men who murder land deliberately and of malice aforethought. Generally, they rent the land which becomes the victim of their murderous designs, but not unfrequently they own it, buying it, as stage contractors buy horses, for the season, and with the fixed determination to make the most out of it in the shortest possible time, leaving those who come after them to drudge unremittingly, with the certainty of the scantiest return for their labor. The processes by which land is killed under the hands of such men, are too familiar to every reader interested in the pursuit of farming, to be dwelt upon. All the wood that can possibly be spared is cut down and sold; the land is ploughed in season and out of season; everything, down to the last blade of grass, is taken from it, and nothing returned. The murder is speedily and effectually accomplished. The murderer, whether he be tenant or owner, satisfied that the land is dead, packs off to rent or buy other farms, where he may renew his assassinations, careless of what he has done, perhaps rejoicing over his evil deed. After him the Deluge. Aye, truly!

Neighbors riding by the dead farm, say "Brown ruined it." Nobody denies that Brown ruined it; nobody puts up any defence for Brown, yet nobody thinks of punishing him. Yet, what has Brown done? Coolly and deliberately he has destroyed the sustenance of hundreds of men, women, children and cattle. He has killed the lands which produced the food that sustained the life of all these hundreds. He has made bread dearer. He has made provender scarce. He has helped to make fuel more costly. He has taken away the life of life. Unknown thousands are suffering the consequences of his crime. Still he goes at large, is honored, respected, beloved, perhaps applauded as a sharp business man.

If anything should be said about punishing Brown, Brown would feel himself insulted, and denounce his accuser as an arrant fool. Talk to Brown or to Brown's neighbor about the remorse Brown ought to feel for his crime, they would laugh in your face, or stare at you for a madman; nevertheless the widow, the orphan, the poorer and even the richer classes, are all injured by Brown's land murder—some of them seriously injured. It may be said that the direct consequence of Brown's crime is to make both food and fuel more abundant, and, consequently, cheaper. But look to the future. For a hundred years to come the land Brown killed will produce nothing. For a hundred years to come, the life of life will be dead. Is this no crime? Ought it any longer to go unpunished.

*From the Southern Farmer.*

## Tobacco Beds—Results of Experiments in Raising Plants.

Mr. Editor: I have been a constant reader of your paper for several years, and occasionally have thought I would add a little from my stock of observations that would be useful; but diffidence has prevented my contributions—a diffidence growing out of conscious want of a thorough knowledge of the subjects which have claimed my attention But when I consider your readers somewhat like the classes in a monitorial school, and that I may consider myself a monitor to some of the lower classes, I am induced to write a lesson, which you will use your discretion whether to present it to the school or not. Much, Mr. Editor, has been said about the management of tobacco plants; the kind of manures, modes and manner of application, remedies against the fly, &c., &c. The experiments, of which I now propose to give you a digest, were made by me. Last January, I selected a tobacco plant patch, for the purpose of making experiments; it was prepared in the usual way, and dressed at the rate of 600 lbs. of guano to the acre, and divided into five parts, and the following are the mode and manner of each:

1st part was covered over with clean brush—plants in abundance.

2d, not covered at all—plants in abundance.

3d, covered over with pine brush—a partial failure.

4th, covered over with stable manure—a total failure.

5th, covered over with wheat straw—a total failure.

The experiment, you see, of covering with straw and manure proved a failure. The result of this experiment has somewhat confirmed me in the opinion—though I may be in error—that, as a general thing, it is not safe to top-dress either with stable manure or straw, for I think it is nothing more than a good nidus for the fly, and just the means of stowing away myriads of them to recommence another year the same work of destruction. This practice of top-dressing with stable manure has been pursued by many farmers for a long time, fully impressed with the belief that it not only hastens the growth of the plants, but acts in a great measure as a preventive against the fly. I am satisfied it does not, and as a justification of the opinion thus advanced, my experiment supported it.

There is no doubt that stable manure as a stimulant is superior to most of our domestic manures, for plants, applied in any way one sees fit; but I do not think it good policy to apply it over the surface, for the reason as stated above, notwithstanding the prevailing opinions.

Last spring the fly appeared in vast numbers in my patch, but I noticed they showed a manifest preference for the spots that were covered with straw and manure; and, by-the-by, they pretty well destroyed the plants on those places, and I called the attention of others to it, who can make good the above statement. I do not pretend to say that this would be the case every year, that the fly will congregate in larger numbers wherever the stable manure is applied as a top-dressing; but the question is, if such is a fact, are not the plants more liable to be destroyed? Unquestionably so, and so far as my observation extended last spring, such was the fact.

I saw an article some twelve months ago from an agriculturist, giving an account of a successful mode of raising tobacco plants; and in this communication of his, he recommends, as a preventive against the fly, a close enclosure of plant patches, with pine brush; and to satisfy myself of the fact, I was encouraged to try it, and it proved inadequate to the purpose of protection against the fly.

The best antidote, in my opinion, sir, as a protection against the fly, is a liberal use of guano. Any application that will accelerate the growth of plants the quickest, in my humble opinion, is the best preventive; and as guano is universally acknowledged to be the most powerful stimulant we have, therefore I believe it to be the most certain cure against insects, if any. Guano causes a quick growth, (at the same time it is very offensive to the fly,) which is very desirable, if not absolutely necessary for the protection of the plants, and should, I think, occasionally be repeated when the plants are dry, unless the plants should indicate from their growth the absence of any necessity for further use.

Also, in the communication mentioned above, the writer recommends the removal of the ashes of a patch, intimating that ashes will impair the efficiency of guano. I made the experiment, and I perceived no difference between the ashes removed and not removed. It has been the general impression, I believe, sir, that it was best not to mix them; now, it seems, an opposite opinion prevails. It seems to be an opposite opinion of some farmers that stable manure ought to be used in combination with guano on a plant bed in the preparation of it. I tested it, and between the application of both united, and guano alone, I could perceive but little difference, if any, in favor of the latter. A practice is becoming general in my neighborhood with many farmers now, of raising plants on land unburnt, and so far as my experience extends, the plants are equally as forward, as vigorous, and as healthy as on land unburnt. I guano the plant bed heavily when sowed, and on the second application of guano, the plants sown exhibited the effect of it, flourishing beyond expectation. I dare say, in the course of human events, but few farmers will burn plant lands, but it will be some time before the farmers can be got out of the track of their grandsires.

The above, Mr. Editor, is a true report of the result of my experiments. Perhaps, if the experiments were made again, the result of each would be different, and I think it will be well to repeat some of them again, if not all; and I would simply suggest that they be made by some of your agricultural friends, in a small way, in order to arrive at a greater degree of certainty. It is a fault, sir, too general with farmers, that they suffer themselves to remain in ignorance of important facts which they might easily ascertain from experiments. These are times when farmers should not be backward in communicating their ideas on such subjects as will prove of practical benefit to their brethren and the public at large.

I must conclude. In making this communication, I endeavored to be as brief as possible, not wishing to trespass upon the patience of your readers.

Wishing you success, and a continuance of your useful labors,

I remain yours, respectfully,
Amelia Co., Nov. 18, 1858. B.

---

Labor, not Worry.—It is not work that kills men; it is worry. Work is healthy; you can hardly put more upon a man than he can bear. Worry is rust upon the blade. It is not the revolution that destroys the machinery, but the friction. Fear secretes acids; but love and trust are sweet juices.

## Deep Cultivation.

There is no doubt whatever that the English farmer is thoroughly awakened to the importance of deeper and more perfect tillage. While anxious after new sources of portable manure, grateful for the boon of the team-thrasher, and patiently waiting for improvement in reaping-machines, he is more than ever alive to the advantage of being able to multiply mechanically the producing power of his fields. This beautiful island of ours cannot be stretched to a broader area; neither can we construct estates two stories deep, one gallery of ground upheld above another, like John Mortin's Babylon gardens; yet every day is creating new demands for increased yields of agricultural produce. Thanks to the implement makers, we are continually receiving fresh tools and machines to render tillage easier, and to aid us in adding to the four or six inches of immemorial staple and equal thickness of good soiling immediately underneath it, thus following the urban custom of gaining room vertically when it is denied to us in the ground superficiencies. The spread of surface-cleansing, by paring and grubbing, mainly brought about by a supply of cheap, efficient and economically working implements, is really wonderful; and with its extension, has also widened in view of the farmer, as to the far greater amount of autumn cleaning which would be worth doing had he but motive power enough for its performance. And there is no question that the approval and practice of deep tillage is also gaining ground. Intelligent agriculturists have not worked their teams in Herculean plowing of fifteen-inch furrows and crumbling stiff clay subsoils, without spreading the fame of their results; practice has not toiled or science preached in vain; and at the present time we believe the most valued boon to the farmer would be the placing in his hands the power that could make deep trench-work and a deep-stirring easy, instead of costly and somewhat dreaded operations. Prizes for plows to work twelve inches deep are no longer deemed preposterous; and as we come nearer and nearer to the successful hauling of draught implements by the steam-engine, the production and testing of the heavy land plow becomes a closer struggle between the manufacturers, and a livelier subject of attention to the business farmer. In the columns of agricultural journals and periodicals we have continual exhortations to increase our teams, strengthen our whipple trees, and dip the share deeper; and the National Society's Journal gives us essays on the best methods of deepening the staple soil, and on the effects of the atmosphere upon the newly upturned earth. The Marquis of Tweeddale devises a most effective subsoil plow, and Mr. Stevens makes known to the world the extraordinary benefits on a large scale which have followed its laborious employment. Various inventors are favoring us with new subsoilers, and Cotgreave's trench-plow seems to have come opportunely for the application of steam power to deep tillage.

There is no occupier who would not like to have his land in as fine tilth and as clean as a garden, deeply worked, pulverized and enriched; only (as he will tell you) he must raise and be able to market green-grocer's and fruiterer's produce, in order to make such perfect cultivation pay. As long as corn and roots and fodder are worth no more per acre than at present, there is a limit to the amount of tillage it will answer to bestow in growing them. Give him a power cheaper, stronger than that of horses, and still more than that workmen; a power that eats only when at work, never wearies, and will accomplish the tillage wholesale at the right time, instead of being obliged to plod on bit after bit, often in unsuitable weather, and he will soon show what an augmentation of produce, and how many other advantages follow a better style of culture.

Even in the virgin soils of America, this need for deeper and better husbandry is already felt. In a New York paper, we read: The great error of Indian corn culture in the West, is shallow plowing; to which we may add, continuing the crop upon the same land for a long term of years without rotation. There are tens of thousands of acres of corn land in the west that have never been plowed more than four inches deep, and the product is not over thirty bushels to the acre. The 12 inches beneath the four that have been disturbed, is quite as good soil as the upper stratum, and only needs loosening to yield up its plant food.

Let us hope that with these considerations before us, the exertions of inventors in the improvement of field implements and the accomplishment of steam tillage will meet with the encouragement they will deserve.—*Farmer's Magazine.*

## On the Change of Seed.

Greater importance should be attached by the farmer to the proper selection of seed.—Obtaining seed from different localities is often resorted to with good results, especially of such crops as are not indigenous to a particular section. The Irish potato, for instance, thrives best to the north of us.—Whenever a change is had, it is better to obtain the seed from a northern locality.—The sweet potato from the south, when a change of seed is desired, should be obtained from where it is at home and grows the most luxuriantly. So of wheat; so of fruits, etc. It is our opinion, that when the land is well tilled and manured, the seed good to begin with, seasonably sown, harvested and taken care of, there is no advantage, as a general thing, but rather a disadvantage resulting from the changing of field and garden seeds, whether grains, beans, peas, bulbs or roots. Propagate from the best, is the maxim always to be heeded. Barley that weighs sixty lbs. per bushel will make stronger and more vigorous plants than that weighing but 50 lbs. "Like begets like," is an old and true maxim.

Hence, let the farmer go through his wheat-field and select the largest and best-filled heads for seed, and continue this for a series of years, and he will thus essentially increase the yield per acre. So of maize, oats, and rye. The farmer should select his seed-corn in this way, and never from the crib, for in the latter case it may have heated, and thus impaired its vitality, or even destroyed it entirely.

A gardener, for several years, pursued a similar course with his beans, selecting only the longest pods for seed, and by so doing greatly increased the yield, as every year produced a relatively larger proportion of long pods, well filled. And this course will be found to hold good with all kinds of seeds.

Hence, it being true that good qualities are transmissible not less than bad ones, it is of the first importance that you have good seed. Having made sure of this, there is no necessity for changing seed, incurring the danger of introducing foul seed into your grounds. Would that farmers and gardeners might practice these hints, and save their own seed, as indicated, rather than use the gleanings, as is too often done, especially with garden products.

Of the common Scotch barley, the variety called Chevalier is best, having produced seventy bushels per acre, sixty pounds per bushel.—*Cincinnatus.*

## A Miraculous Corn.

The Michigan Farmer says: "There are new circulars being issued which proclaim the Wyandotte Prolific Corn the wonder of the age. Its yield is terrific—twenty stalks from a single grain, and one hundred and twenty-eight bushels of shelled corn a common product. This is all certified to by respectable parties, and of course we have to believe it. It must be so, or it would not be put in print!—especially by those who have the corn for sale at the rate of $4. enough to plant an acre. Wyandotte corn is a new variety of white corn, said to have come originally from California, where it was cultivated by a tribe of Indians of that name. It stools out more than any other variety, and if the accounts are correct, it yields remarkably. Mr. Wm. Cochrane, of Corunna, Shiawaesse county, the agent of Messrs. Penfield, Burrall & Co., nurserymen, Lockport, N. Y., called upon us on the 25th, and showed us an ear of this corn, which he had bought at Evansville, Indiana. It was one of fourteen which had grown from a single grain. The ear was handsome in shape, about eleven inches long, and the grains of corn were large, white, flat, compact and regular. The question is, will this corn ripen as far North as this? It did not ripen in New York this past season, but it was an unusually wet, cold fall, and spring. The Wyandotte corn certainly is worth trying, but don't depend upon it for a crop.

Ants and Fruit Trees.—Many really suppose that ants are injurious to fruit trees. This not so. They visit fruit trees invested with plant lice, both roots and branches, and seem to use the lice as their milk kine. They are sought by the ants, because of a sweet fluid furnished by these lice, which supplies them with nutrition. This accounts for their being about fruit trees. Take warning, then, when you see the ants busily ascending and descending in regular succession, young trees, and immediately apply ashes or lime to them when the dew is on; also, apply one or both to the roots.

## A Farmer's Library.

Dr. Johnson being once asked whom he deemed the most miserable, replied, "The man who cannot entertain himself with a book on a rainy day." Were the question put—What farmers are likely to make the most rapid progress and improvement in husbandry? the answer would be, other things being equal, those who read most on the subject of their vocation. A man who reads little, no matter what his vocation is, will be likely to think little, and act chiefly with reference to tradition received from former generations; or else in imitation of what is going on about him. There is always hope of a man who loves reading, study and reflection. Not all who buy books liberally, and patronize the press generously, are readers. There is a class of fancy book buyers, who purchase freely and extensively, but who read little, and profit nothing from the stores of knowledge treasured up in their libraries. Fine collections of books nicely arranged on shelves may beget desires of covetousness, but can impart little or nothing, only as they are read, studied. and referred to.

Every farmer, whether rich or poor, learned or unlearned, should have a collection of books on agriculture, horticulture, and the several subjects more or less intimately connected with the objects of his special pursuit. A few good books, costing but little, should be the beginning of the farmer's library.

## Preserving Celery.

Our celery would keep sometimes until May, had it a chance. We always preserve it out of doors, by filling in the stalks taken elsewhere, between two standing rows, being careful to place the stalks upright, and not in contact with other stalks, having dirt well packed in between them. After the whole is prepared, the mound is well spanked with the spade, leaving the tops of the celery just peeping out at the apex; this is covered with straw or any dry garden haulm, and then a roofing of old boards completes the business.

This season we shall try another process—allowing the celery to remain in the rows as it grows, banking it up well, and securing as before. We are satisfied in advance, that this is the true mode of keeping celery. The less it is disturbed the better, only protect it against moisture and atmospheric changes.—*Germantown Telegraph.*

## Warrenton Foundry.

We lately paid a visit to this establishment, and take blame to ourself, for not doing so at an earlier day. We were surprised at the extent and convenience of the arrangements of Messrs. Williams & Alston, for the manufacture of Plows of every form and description. Every part of the work is done on the spot, under their own superintendence, with all the advantages that steam-power, an excellent foundry, and skilful mechanics can produce. Some idea may be formed of the extent of their business, when we state that they turn out, on an average, about forty plows per week, being upwards of four thousand per annum, supplying Warren, Franklin, Granville, Nash, and other counties of the State. They have a large stock on hand, among which we noticed some admirably constructed plows and cultivators, intended for exhibition at the Petersburg, Henderson and State Fairs, which we feel confident cannot be surpassed in skilful construction, and excellent workmanship. We saw some specimens of hollow ware, cast at this foundry, equal to any and surpassing the average quality of Northern ware of the same description. They are intended for exhibition at Petersburg and the State Fairs, and will prove that, with proper encouragement, North Carolina would soon be independent of Northern manufacturers. Men like Messrs. Williams & Alston are invaluable in any community, and we rejoice to say, their exertions are properly appreciated in ours.—*News.*

Shade in Pastures.—Are your pastures provided with shade-trees? If they are, well and good; if not, open the way to a strip of woods, that your stock may have the shade when they wish; and then plant in suitable places in the pasture, some of the hardier trees, which should, of course, be well protected, till they grow out of the reach of the cattle. Locusts, oaks, elms, and various other trees may be planted thus with profit. The advantages of shade to your stock will be much more than the cost of planting the trees.

# Horticulture.

S. W. WESTBROOK, EDITOR.

## Wash for Fruit Trees.

Various mixtures have, from time to time, been recommended for the washing over, or, properly speaking, dressing the trunks and branches of fruit trees. Lime is recommended by persons oftentimes, because it was used in the time of our great-grandfathers, and they have always heard lime is good for trees; so it is, in some cases, used on the ground--that depends altogether on the nature of the soil. Lime, if not very carefully used even by persons skilled in the management of fruit trees, is highly dangerous to the trees when used on the stems and branches; it sticks too close to the bark, and stops up the pores. The first indication is the dead or dull color of the bark. This occurs after applying once, if strong; it takes two applications, if not very strong. If this treatment is persevered in, the following indications are exhibited by the tree, to show its dislike to the practice: The top, tender or one-year-old shoots will die back at the points; the leaves will not look so green as a tree that has had nothing done to it. If the practice is still persevered in, the points of the shoots gradually die back all over the tree, giving it, of course, a sickly appearance, and unless something be done, dissolution will speedily follow. When the points of the shoots have generally died back, the trees will not bear well. If they have much fruit, it is small, and sometimes cracked. Then the complaint comes: Well, this ground don't suit fruit. Somehow, I used to have good fruit, but lately the trees don't seem to do. I whitewash them every spring, too, and this don't do. I believe I must give it up now. We often hear men say this. Now, after having tried all kinds of washes we could hear of at all likely to have a beneficial effect, and experiencing the trials made in the Royal Gardens of England, [we do not say this because the word royal makes it better, but because money in those gardens was no object in trying experiments, John Bull generally paying all losses without grumbling,] we aimed at the conclusion, that however small in quantity lime is applied to trees, or however mixed with other ingredients, is, to say the least of it, of no earthly benefit. We have been a witness of, and participator in, all kinds of experiments in Horticulture, and have always noticed the ill effects of lime. In fact, a man is considered behind the times, if he use lime in preference to other mixtures much better. The best mixture we have ever tried, or ever seen tried, for fruit trees generally, is as follows: 1 lb. of flour of sulphur, 2 lbs. of soft soap, such as is used in washing, mixed to the consistency of thick paint, with tobacco water so strong it is almost black. It should be warmed a little, so it will mix well; then apply it to the tree. Clear off the trunk of the tree; that is, if there be any moss on it. First rub the mixture on well in all the crevices; do not miss any. Try one tree like this, and use any mixture you like on another tree, and the tree will show for itself, other things being equal.

P. S.—The tobacco water may be made quick by pouring hot water on the tobacco leaves. It must be strong. The dressing for grape-vines is somewhat different, which we will give in time for use.

HAMILTON & CARTER,
Florists and Nurserymen,
Raleigh, N. C.

## Drying Fruit.

The subjoined directions for drying fruit would be more appropriate next summer, but they are valuable enough to be borne in mind by those whom they interest, until the time comes for putting them in practice. We understand that the dried fruit exhibited by Mr. Organ at the late Fair was of the most superior quality, and attracted the attention of all who saw it. The flavor of sun-dried fruit is so much better than that from any artificial process, that an expeditious and economical mode of securing it during the usually showery month of August, will be welcomed by all good housewives.—EDS. SOUTHERN FARMER.

Instead of a model for kiln-drying fruit, which process impairs its flavor, more or less, I submit the following cheap and economical plan: Have a large table, or as many as are required, covered with tin, of convenient height; place your fruit on them in the sun; and in one day apples will be safe, peaches in two. The tin draws the rays of the sun uniformly, and leaves the fruit of a nice bright color. There is much economy of time and labor saved in this mode of drying fruit, as it is not necessary to turn the fruit over, and requires no attention, except full exposure to the rays of the sun. I have never used tin before this year, in drying fruit, and will submit samples for the inspections of the judges at your approaching Fair.

S. J. ORGAIN,
Lewisville, Brunswick co., Va.
Oct. 28, 1858.

## Profits of an Orchard.

It is reported that one of our farmers has this fall, after making a large amount of cider and vinegar from his orchard, sold the balance of his apples for $900, and the buyer claims that he will realize *six thousand dollars*, by the operation.

We suppose there is little doubt of his being able to do it. The orchard consists of some 5,000 trees that have just come into bearing. The enterprising proprietor has twelve thousand trees already set out, and will soon have an orchard that will yield him an immense revenue.

One hundred acres of orchard will contain some six thousand trees, and they will yield enough the sixth year after planting to pay all expenses, of trees, planting and cultivation. When in full bearing they will furnish some three barrels of apples to the tree every other year. If the orchard is on any of our Railroads, the apples will nett two dollars a barrel, or six dollars to the tree, which will be equal to three dollars to the tree every year. Thus we see the handsome annual income from 100 acres, or an orchard of 6,000 trees, of *eighteen thousand dollars.* If these statements are exaggerated by one half, it will be seen at a glance, that nothing promises *half so well.* But there are a thousand facts that prove this estimate below instead of *above*, the reality.

North Carolina has a position among her sister States, that enables her to supply them with many valuable things, but the day will come, when her fruit and vintage will be one of her most *pleasant and profitable* sources of income, and the market cannot easily be overstocked.

◆

## The Grape Culture.

The New York Tribune makes the following reference to a discussion upon the grape culture in the Pomological Convention in session last month in that city:

The discussion in the evening on grapes was peculiarly interesting. For twenty-five years past we have been sticking to the Isabella and Catawba without looking for anything further; but the discovery of the Delaware and Rebecca have produced a revolution. The Delaware, a red grape, is rated by European pomologists as being equal to many of the vaunted European varieties as a table grape. The Clara promises well.—The Hartford Prolific has this year ripened a month earlier than the Isabella, to which it is of equal excellence and productiveness. It promises to take the lead as a Northern grape in the large portion of the country where the Isabella and Catawba will not ripen. Dr. Berckmans has ordered a large number of vines for his plantation in South Carolina. He expects they will ripen there for wine making in June, so that they will not interfere with his later wine making.—He having thirty acres of the Catawba planted. Mr. Axt has been sending large quantities of grapes from South Carolina to the New York market. Mr. Redmond, of Augusta, Ga., is giving his whole attention to the culture of seedling grapes.

◆

*From the Fayetteville Observer.*

## Fruit Trees.

We owe thanks to our friend at Rockingham for the following very pleasant article on fruits and fruit trees. It fairly made our mouths water. But we think it will do more than that for some of our readers, if they will profit by the experience of our friend in selecting their trees.

We publish this article with pleasure, and will be glad to hear from him again on the same or any other subject, for he writes well what he writes.

By the way, the apples alluded to by our "Red Springs" correspondent were among the finest we ever tasted.

ROCKINGHAM, Oct. 7, 1858.

*Messrs. Editors:* Inasmuch as the season for planting fruit trees is near at hand, and many of your readers, doubtless, intend to avail themselves of it, to secure a supply of good fruit hereafter, I may not be doing an unwelcome work, if I make some suggestions upon the subject. I have had some little experience in fruit-growing, and have read a good deal from the most scientific, practical and successful Horticulturists in our country. It is from these sources I shall extract what I write. I desire to see my fellow citizens enjoy, to the fullest extent, all those healthful luxuries which a bounteous Providence has lavished upon them, and I know of none more so than well-ripened and highly-flavored fruit. To encourage them to plant and cultivate with liberality and intelligence—not those detestable kinds which too much "cumber the ground," but varieties of excellent and delicious quality—is the object which I wish to accomplish.

I shall not discuss the question of adaptedness of our soil and climate to the production of fruit; that has been settled by the experience of intelligent pomologists in nearly all sections of our State. I have seen grown, in my own neighborhood, in a soil originally covered with long-leaf pine, as fine specimens of apples, peaches and pears as the most capricious taste could desire. Bartlett pears, weighing twenty-eight ounces, were raised this very year by my neighbor, Dr. Covington, whilst the specimens in his own and the grounds of other zealous cultivators in this county, of Duchesse d'Angouleme, Easter Beurre, Louise bonne de Jersey, and other variety of pears, were as pretty and well flavored as heart could wish. At the recent meeting of the American Pomological Society in the city of New York, the finest exhibition of apples made, were grown on the grounds of Messrs. Westbrook & Mendenhall, near Greensborough. There were seventy-seven varieties presented—most of them of surpassing beauty and excellence. And now need I speak of our capacity for the peach? The peaches of New Jersey, that far-famed district which once prided itself upon being the very Eden of the peach, are not to be compared to those grown with us for sweetness and delicacy. It requires a more burning sun and a longer season than they have, to elaborate the juices of this fruit into their attainable deliciousness. I am rather disposed to give it up, so far as cherries are concerned; but believe that by using the Mahaleb and the Morello as stocks are budding, and then making the trees branch near the ground, we can produce fine fruit of this kind.

After a man has selected a well drained and elevated situation, with a soil of some depth naturally, or rendered so by manuring, he wants to know what varieties of the different fruits it will be proper for him to purchase. To those who are not prepared to answer this question for themselves, I propose to make a few suggestions, with a view of assisting them to form a conclusion. The kinds which I shall propose, I have found to be worthy of cultivation, either from my own experience or that of others, upon whose testimony full reliance can be placed.

The following varieties of apples are worthy of cultivation—those in italics are of Jouthern origin, and, therefore, well adapted to the climate: Harvest, *Red June*, Summer Pearmain, *Magnum Bonum*, Golden Russett, Vandemere, *Green Cheese*, *Hall*, *Carter's Winter*, *Shockley Red Warrior*, *Berry*, *Mangum*, *Julian*, *Equinctely*, and White Winter Pearmain. The early May is valued only for its season. This list might be enlarged considerably; but my object is simply to guide those desiring information, to the selection of a few valuable kinds.

The writer would give a handsome sum, if he had known ten years ago that there were pears of such surpassing excellence as the following list embraces. If he had, instead of a few bearing trees upon the Quince stock, his orchard would contain more than a hundred. Unfortunately for me, I did not know that there were varieties "not dreamed of in my philosophy," of good size, beautiful color, fine grain, and melting delicious flavor. I thought that all were "chokes," "pounds," or "June pears," and required nearly a quarter of a century to bring them into fruitfulness. I disliked to plant exclusively "for my heirs." But I was wrong. There are many most excellent pears, which will produce fruit, by using the Quince as a stock, in from two to six years from the bud, and on the seedling pear stock in from four to eight years. Now, Messrs. Editors, put on your spectacles—my hand shall be steady to make the chirograph legible—for I shall write names which are not exactly all English, and it will require some care to prevent my introducing *old* fruit under *new* names. We shall see.

Beurre Giffard, Beurre d'Anjou, Beurre, Superfin, Beurre Diel, (that is not D-*e*-i-l,) Beurre Easter, Beurre Clairgeau, Bartlett, Belle Lucrative, Doyenne White, Doyenne Gray, Doyenne Boussouck, Doyenne d'Ete, Doyenne Gris d'hiver nouveau, Duchesse d'Angouleme, Doyenne Sieulle, Fondante d'Automne, Lawrence, Jeckel, Winter Nelis, St. Michael Archange, Vicar of Winkfield. I might add to this, Howell, Heathcot, Henkel, Ott, Sheldon, Ananas d'Ete, Bon d'Ezee, Beurre Langelier, Josephine de Malines, and many others.

The following list of peaches comprises varieties which no epicure would disdain: Early Tillotson, Early York, George IV., President Amelia, Grosse Mignonne, Druid Hill, Chinese Cling, Late Admirable, Harper's Cling, Oldmixon Cling, Ward's Late, Crawford's Late, Eaton's Golden Cling, Anne Ruffin, Heath, Large White Cling.

Breda, Large Peach and Moorpark are good Apricots. Green Gage, Imperial Gage, Coe's Golden Drop, Jefferson, Lawrence, and Washington, are fine Plums. May Duke, Reine Hortense, Belle de Choisey, Black Tartarian, and Elton, are fine Cherries.

The varieties of each kind of fruit above named could very easily be enlarged; but an orchard containing these, well cultivated and in full bearing, would give the proprietor a collection of fruits good enough for the taste of mortals.

Hereafter, I will write you another letter—perhaps more than one—which may be devoted to the mode of planting, the situation and general managemant of the fruit orchard. In the meantime, let those who desire to have the best of fruits purchase, read and practice the teachings of "Downing's Fruit and Fruit Trees of America," and "Field on Pear Culture."

Very respectfully.
POMOLOGY.

# For the Ladies.

## FLORICULTURE.

Greenhouse.—The past month has been exceedingly fine, having very little frost—not enough to injure any plant, unless very tender. The house must have all the air it is possible to admit, when the thermometer outside is not below 45°. Where orange trees are grown they should be syringed freely every other day, after sunrise, unless in freezing weather, they must not be wetted overhead at night, as they are more liable to get frosted. As soon as the green fly appears, fumigate the plants with tobacco pulp, if found dry. If mildew appear, caused by dampness, shake some dry sulphur on the plants affected. Burning sulphur is a good remedy, but dangerous in unskilful hands.

Camelia Japonica.—The buds will now soon open, of some, if early kinds. Apply weak manure water once per week, until the first buds open, after which it will be of no benefit. If the buds drop before opening, it shows there has been a want of attention the past summer. If they have suffered for water they must not be wetted overhead after the buds open.

Flower Garden.—Dahlias are now in their beauty, and we have not a more noble flower at any season of the year, though they are liable to be cut by frost any moment.

Chyranthemums.—This lovely tribe of plants are really very interesting. The disversity in the colors of the flowers make them well worthy of cultivation. They are very hardy, and the pompone varieties are truly beautiful.

HAMILTON & CARTER,
Florists & Nurserymen.
Raleigh, N. C.

◆

## State Fair.

GREENHOUSE PLANTS, EXHIBITED BY
HAMILTON & CARTER,
*Nurserymen, Raleigh, N. C.*

100 kinds of Greenhouse Plants.

A select collection of Camelia Japonica.

A collection of small Cactus.

A choice collection of small Evergreens.

A select collection of Bulbous Roots, consisting of Hyacinths of all colors, double and single.

Amarzilla, 1 dozen varieties.

Crocus, 6 kinds; Anemone 12 kinds.

Gladidus, 6 kinds; Tulips, 8 varieties, named; double and single mixed colors.

Boguth, large and small; also, a variety of cut flowers.

1 dozen kinds of Dahlias.

FRUIT TREES.

Apple, Apricot, Peach, Pear, Plum, Cherry, Nectarine, Almond and Quince.

STRAWBERRY.

Six of the best kinds, most suitable for this climate. From our collection we have expelled all the Engtish varieties, except Alice Maud, late.

OIL PAINTINGS.

A very choice collection, principally ruins and landscapes, taken from the scenery of England, Scotland and Wales.

◆

Corn Oysters.—Take a dozen ears of corn, (the white flour corn is the best,) grate it off the cob, add to it one pint of new milk, two teaspoonsful of ground pepper, one of salt, a teacup of flour; stir together, and fry them small in hot butter as griddle cakes. Send them to the table hot and covered. To be eat with butter. Good at any meal, but fine for tea, and very much resembling oysters.

## Planting Bulbs.

October and November are the best months for replanting Tulip, Hyacinth, Narcissus and other flowering bulbs. By varying the times of planting, you vary the periods of flowering; as instance—a bulb planted early in October will flower early in March; one planted the last of the month will bloom about the last of March. Good common garden soil, dug to a depth of twelve to eighteen inches, is all that is requisite. Raw manures are injurious; but perfect drainage is absolutely necessary; for if water stand in the bed twenty four hours, it will more than likely destroy the bloom, if it do not destroy the bulb entire. When planting, have ready some fine sharp sand. With your dibble or trowel open a place about three inches deep. Put in, first a handful of the sand, then set the bulb and cover it with sand; then replace the earth. When the bed is all planted, throw over it about four inches of straw, or any refuse litter, merely to protect it from heaving by frost during winter. Early in spring, or as soon as the weather becomes warm, remove the litter, and you will have a fine show of flowers.

◆

Manures.—T. W. Field, in a paper read before the Farmers' Club of the American Institute, on Manures, states the following propositions:

1. Manure does not waste so long as it is unfermented or undissolved, and these conditions may be effected by drying or saturation.

2. Fresh manure is unfit for food for plants.

3. Fermenting manure, in contact with inert matter, has the power of neutralizing vicious properties, such as the tannic acid of peat, and making it a fertilizer.

4. Manure wastes in two ways—the escape of gas, and the dissolving of its soluble salts.

5. The creative power of manure, mixed with other substances, is capable of multiplying its value many times.

6. The value of manure to crops is in proportion to its divisibility through the soil. The golden rule of farming should be: Small quantities of manure thoroughly divided and intermingled with the soil.

◆

Molasses Cookies.—One coffee cup of molasses, half a cup of butter, three teaspoonsful of soda, one and a half cream of tartar, flour enough to roll out.

## SCIENTIFIC AMERICAN.

### PROSPECTUS.

*Volume Fourteen begins September* 11, 1858.

### MECHANICS, INVENTORS, MANUFACTURERS AND FARMERS.

The *Scientific American* has now reached its fourteenth year, and will enter upon a new volume on the 11th of September. It is the only weekly publication of the kind now issued in this country, and it has a very extensive circulation in all the States of the Union. It is not, as some might suppose from its title, a dry, abstruse work on technical science; on the contrary, it so deals with the great events going on in the scientific, mechanical and industrial worlds, as to please and instruct every one. If the mechanic or artizan wishes to know the best machine in use, or how to make any substance employed in his business—if the Housewife wishes to get a recipe for making a good color, &c.—if the Inventor wishes to know what is going on in the way of improvements—if the Manufacturer wishes to keep posted with the times, and to employ the best facilities in his business—if the Man of Leisure and Study wishes to keep himself familiar with the progress made in the chemical laboratory, or in the construction of telegraphs, steamships, rail roads, reapers, mowers, and a thousand other machines and appliances, both of peace and war—all these *desiderata* can be found in the *Scientific American*, and *not elsewhere*. They are here presented in a reliable and interesting form, adapted to the comprehension of minds unlearned in the higher branches of science and art.

—

TERMS:--One copy, One Year, $2; One Copy, Six Months, $1; Five Copies, Six Months, $4; Ten Copies, Six Months, $8; Ten Copies, Twelve Months, $15; Fifteen Copies, Twelve months $22; Twenty Copies, Twelve Months, $28, in advance.

Specimen copies sent gratuitously for inspection. Southern or Western money, or Postage Stamps, taken for subscriptions.

☞ Letters should be directed to

MUNN & CO., 128, Fulton St., N. Y.

Messrs. Munn & Co. are extensively engaged in procuring patents for new inventions, and will advise inventors, without charge, in regard to the novelty of their improvements.

Sept. 1, 1858. 9

---

## AMERICAN STOCK JOURNAL,

### For 1859.

A MONTHLY PAPER, of 32 large octavo pages, devoted exclusively to the subject of Stock-Growing. It is the only paper of the kind published in the United States, and the topics treated of are deeply interesting to every owner of a domestic animal, whether living in the town or country.

The volume will commence with the first of January, 1859, and the numbers will be issued promptly on the first of each month. It will be printed on fine, clear paper, with entirely new type; and each number will be illustrated with Cuts of Animals, in the best style of art. Our motto is: A good paper, a large circulation, and a small price, invariably in advance.

TERMS:

| | |
|---|---|
| Single copies, one year, | $1 00 |
| Six copies, one year, | 5 00 |

Clubs of ten copies, one year, 80 cts each.

Clubs of twenty-five or more copies, one year, 75 cents each.

☞ An extra copy to the person sending us 15 or more names at 80 cents each.

Specimen copies, Prospectuses, and Posters sent gratis to all who wish to examine them or get up clubs of subscribers.

☞ All orders should be addressed to the "AMERICAN STOCK JOURNAL," No. 140, Fulton Street, New York City.

D. C. LINSLEY.

A. O. MOORE, Agent, Agricultural Book Publisher, No. 140, Fulton Street, N. Y.

12—2t

---

## 50,000 FRUIT TREES.

J. & O. LINDLEY of the N. C. Pomological Gardens, has for sale 50,000 Fruit Trees of the following kinds, viz: Apples, Peaches, Pears, Apricots, Plums, Cherries, Nectarines, &c., all native acclimated fruit of the best kinds for the South, from the earliest to the latest keeping kinds. Those wanting trees will please write to Joshua Lindley, New Garden, Guilford co., or to Owen Lindley, Cane Creek, Chatham co. N. C. Catalogues will be sent to all applicants.

JOSHUA LINDLEY.
OWEN LINDLEY.

Nov. 6, 1858. 11—3t

---

## "THE SPIRIT OF THE AGE,"

**A Large Weekly Family Newspaper,**

IS PUBLISHED IN RALEIGH, N. C.,

**BY A. M. GORMAN,**

*Editor and Proprietor.*

Price $1 50 for single copies—to Clubs of five and upwards, $1 each, *in advance*.

# PROSPECTUS

OF THE

# "North Carolina Planter."

The present No. closes the first year of the publication of this Agricultural Periodical. We have endeavored to make it of eminent *practical* advantage to its readers, by the publication of such matters of *experience*, as well as scientific demonstration, as would enable all farmers to apply the information communicated to their own *profit*. How we have succeeded, we must leave others to say.

We are now looking forward to its publication for another year. The inadequate support extended to it in the past, is enough to discourage us in further efforts to furnish the Planters of North Carolina with a *home* journal. But we have determined to try it one year longer—believing that those who feel interested in this enterprise surely *will* give us their aid in sustaining it. And if they will do this, we have no fears as to the result.

WILL THEY DO IT ?—Is the important interrogatory. If they will, the Publisher promises to make such continued improvements in its mechanical execution, as will make it an honor to the State. *But to do this, his list of subscribers must be greatly increased.* Indeed, his list at present will not pay for its publication!

The Editorial Departments are well sustained by gentlemen entirely competent to teach. And its numerous Correspondents keep the reader well posted up with valuable information derived from science and practical experiments, in the various departments of husbandry.

The Publisher of the Planter intends to make an honest effort to furnish an Agricultural Magazine *worthy* of the support of North Carolinians and the South generally; and if he fails in securing a *living support*, he will be forced to retire from the field with the conviction that they do not want such a publication in their midst.

TERMS.—Single subscribers $1. Six copies for $5. Twelve copies for $10. Twenty copies for $16.

AGENTS.—We want active Agents all over the South, to whom we will allow 20 per cent. on all subscription money sent. Specimen copies sent to all who desire to see the Planter.

☞ POSTMASTERS and others are requested to act as Agents on the above terms.

☞ The *Cash in advance* is required of all subscribers.

☞ We earnestly appeal to all friends of our Planter to aid us in increasing its circulation.

All Communications to be addressed to

A. M. GORMAN, Publisher,
December, 1858. Raleigh, N. C.